University of Alberta

A Comparative Analysis of
FEMALE LONE PARENT FAMILIES
in Canada and the United States

by

Pamela Jane Smith ©

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Doctor of Philosophy

in

Demography

Department of Sociology

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled A Comparative Analysis of Female Lone-Parent Families in Canada and the United States submitted by Pamela Jane Smith in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Demography.

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ABSTRACT

This study compares the characteristics of female lone-parent families in Canada and the United States using data from the Canadian Marital History Survey (1984) and the American Marital History and Fertility Survey (1985). Canadian and American lone mothers are compared to married mothers, who form the frame of reference for the comparisons; the cross-cultural comparisons are then performed. Retrospective data collection made it possible to explore both the "antecedent" and "current" characteristics of female parents. The antecedent variables, defined as early marriage and early childbearing (before age 20), are theorized to predispose female lone parenthood. The current variables are the demographic, social and economic characteristics female parents reported to possess at the time of the survey. Intermediate variables, education and employment, fall between the antecedent and current variables forming an integral link in the cause and effect framework. Cross-classified percentage tables and a logit model are used in the analysis.

It was found that, for both countries, lone mothers were more likely than married mothers to have experienced the determinants -- early marriage and early childbearing, with early childbearing being the stronger of the two antecedents. Early marriage and particularly early childbearing were found to deter educational attainment and delay employment experience. The current characteristics indicate that lone mothers were socially and economically disadvantaged compared to married mothers in such areas as education, income and home ownership. Female lone parenthood is revealed to be transitional in nature having a total duration, on average, of about five years in both countries. The transitions occur, however, at critical points in the family- life cycle -- never-married mothers appear in the

youngest age group (18-24) when mothers have infants to care for while separation and divorce occur in the young to middle age groups (25-49) when mothers have dependent school-age children. The transition to widowhood usually occurs at later ages and is therefore less likely to be critical.

The cross-cultural comparisons reveal differences with respect to the proportion of mothers in each country who exhibit particular characteristics, but the relationship between lone and married mothers regarding these characteristics held a parallel course. Overall, the findings for Canada and the United States reveal a pattern that is consistent and similar.

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CHAPTER 1

INTRODUCTION

The institution of family and the role of its members have changed considerably over the past century. Changes in the size, structure and functions of the North American family have been well documented over time. In the more recent period of rapid social, economic and technological change in Canada and the United States, the concomitant change in family patterns has been particularly marked. Family researchers are now exploring the evolution of new family forms and the impact these may have on the traditional family and society at large. Among the emerging family types, the increasing incidence of female lone parenthood is a significant family transition with broad implications for lone mothers, their dependent children and major societal institutions.

Family historians have been diligent in mapping fertility trends over time as a basis for understanding and explaining family change. Families in early North American society were large. Birth rates in Canada and the United States gradually declined, with fluctuations, from the 1850s onward.[1] Declining fertility occurred in tandem with the growth of industrialization; hence, the combined effect of these forces influenced, and were influenced by, significant changes in the lifestyle of individuals and families. The separation of work from the living place occurred as employment shifted to factories and offices in urban centres. Similarly, many functions that once were the responsibility of the family including education, health care, economic support, protection, religion and recreation, were transferred to more specialized social institutions such as the market, government and church. While pluralistic family forms did indeed exist in earlier times -- that is, nuclear units along with extended, lone-parent, and blended family forms, it was the more mobile and adaptable nuclear family that became the norm.[2]

The variability historically displayed by the family became more dramatic following World War II. A favourable economy in the immediate postwar years stimulated striking, although temporary, rises in marriage and fertility rates, later to be evidenced in the "baby-boom" generation. In the 1960s, however, a sharp decline in fertility rates commenced. Compared to the earlier pattern of gradual demographic change, some claim the abrupt fertility decline was truly remarkable while others argue it simply represented a return to the usual historical pattern.[3] In either case, the 1960s initiated a period of marked change for the family. Declining fertility and changing family roles occurred in tandem with an influx of women to the labour market which later caused social scientists to claim that a "revolution" in labour force participation among women clearly took place.[4]

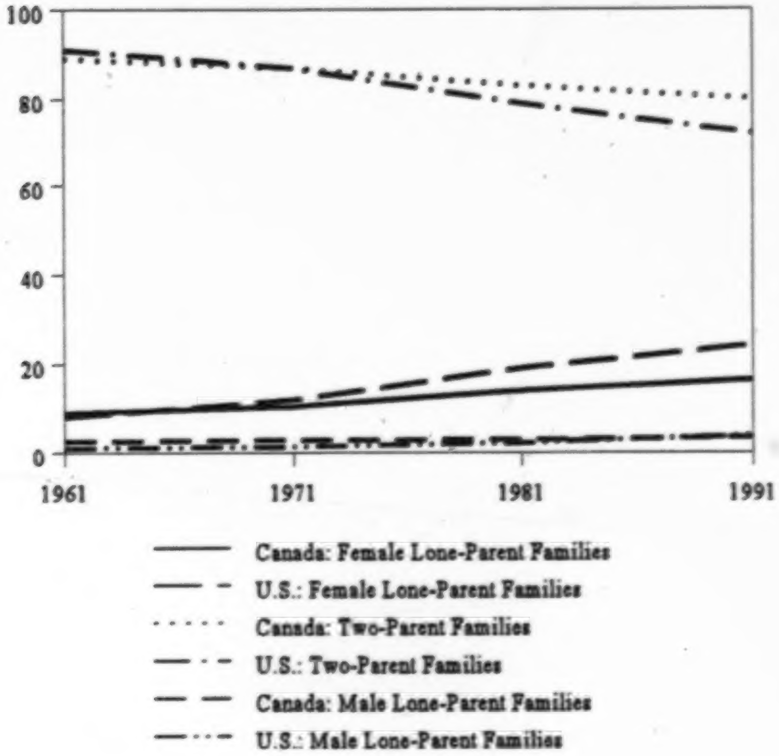
The rise in women's labour force participation in the 1950s (in the United States) and 1960s (in Canada) appeared as a two-peaked or bimodal pattern. This represented women entering the labour force at young ages, withdrawing during family formation, then re-entering at later ages when children were school age or older. The dramatic increases since then, however, have been due to the increased rates of young married women -- those aged 20-34 years and most likely to be raising small children.[5] Women not only established themselves in the labour market, the proportion enrolled in advanced educational institutions also increased substantially during the 1970s in both Canada and the United States.[6]

Along with declining fertility and women's pursuit of higher education and employment, rising divorce rates since the 1960s played a major role in family change. The rise in rates in the United States began about 1962. The trend gained impetus between 1970 and 1980 when no fault divorce law was introduced in all but two of the American states. A more dramatic upswing in the Canadian rates followed the relaxation of divorce laws in 1968 and 1985.[7] In the past, mortality had been the main contributor to the loss of a spouse and, as female life expectancy exceeds that of males, the majority of the bereaved were widows of older ages who had outlived their spouses. With changing attitudes toward fertility, nuptiality, parenting, the status of women in the family and society and the reciprocal changes in divorce legislation, the predominate cause of marital dissolution shifted from mortality to divorce and, consequently, from the older to the younger age groups. The revolutionary effects of these forces acting in unison are apparent in the recent and dramatic increase in nontraditional family forms.

Cohabitation has become an increasingly common lifestyle in which each partner may or may not have been previously married. This trend shows no sign of levelling off, although cohabitating couples are still a small proportion of all "couple households".[8] Technological advances affording improvements in health and longevity in combination with divorce and remarriage have fostered the growth of sequential and blended families. The divorce process alone, however, creates two households where formerly there was one and, if the marriage produced children, at least one of the lone-parent households constitutes a broken family. As males are more likely than females to remarry, the overwhelming majority of lone-parent families are headed by a women. Further, while overall fertility rates declined during the years following the baby boom, rates of illegitimacy continued their upward swing. Illegitimacy has been increasingly concentrated among teenage women, thus female lone-parent families also derive from young never-married women who have experienced a premarital first childbirth.[9]

Figure 1.1

Male and Female Lone-Parent Families and Two-Parent Families
as a Percentage of all Families with Children
Canada, 1961-1991 and United States, 1960-1990



Sources: Statistics Canada, *Lone-Parent Families in Canada*, Catalogue 89-522 (Ottawa: Minister of Industry, Science and Technology, 1992), Table 1.2; U.S. Bureau of the Census, *Household and Family Characteristics*, Current Population Reports, P20-483, (Washington, DC, 1995), Table F; U.S. Bureau of the Census, *Statistical Abstract of the United States: 1961* (Washington, DC, 1961), Table 34.

The recent concern regarding female lone parents, then, stems from their increasing numbers, their young age, and the fact that these young mothers with dependent children generally have few resources available to maintain a family. While the majority of two-parent families are now two-earner families, it could be expected that the lone mother, as the sole family provider, has the greater likelihood of residing in poverty. Figure 1.1 indicates that female lone-parent families in Canada grew from 9.0% of all families with children in 1961 to 16.4% in 1991; the corresponding percentages for the United States are 8.2% (1960) and 24.2% (1990), respectively. On the other hand, the proportion of lone fathers in both countries has remained less than 4% of all families with children. While recent research indicates that the number of female lone-parent families has increased considerably, little is known about the particular characteristics that lead to or result from the transition to lone motherhood. The purpose of this study is to examine the 'causes' and 'effects' of female lone parenthood in terms of the 'antecedent' and 'current' characteristics of women that are involved in such transitions.

Sociologists have long established the importance of micro/macro linkages in family studies -- that is, the reciprocal influence between the family and other societal institutions.[10] Female lone-parent families have impact on the labour market, the judicial system, the tax system, the health care system, and programs within systems of government such as social welfare, subsidized day care and child maintenance for separated or divorced mothers. The linkage between the family and societal units has particular significance in the current period of economic recession and budgetary cut-backs. There is a swing in North America to almost deification of the family with the aim of returning to it some of its lost rights and prerogatives. The family is therefore expected to become more accountable regarding the education, health and behaviour of its children.[11] Whether lone mothers have the resources (time, health, income) to undertake these growing responsibilities, or require assistance in terms of social policy initiatives in order to do so, is a question worthy of research.

Objectives of the Study

This study is essentially a comparative analysis of female lone-parent families in Canada and the United States. The objectives within this scope are two-fold.

1. To analyse female lone parents in terms of two basic characteristics -- 'antecedent' and 'current' characteristics. The antecedent characteristics are those theorized to predispose female lone parenthood while the current characteristics are the effects -- the characteristics possessed by the respondent as reported at the time of the survey. Female lone parents will then be compared to female married parents. (Married mothers represent the traditional two-parent family which is assumed to be the norm.) The aim is to identify where and to what degree lone mothers vary on the antecedent and current characteristics compared to married mothers. Lone mothers will also be compared to lone fathers in certain instances, thus providing another reference point for assessing the socio-economic well-being of lone mothers; for example, in areas such as education and income.
2. To compare the characteristics of female lone-parent families in Canada with those of their counterparts in the United States. These comparisons are expected to reveal the cultural similarities and differences that prevail in both nations and indicate developing trends. Attainment of this objective could be very informative as trends that occur in the United States at one point in time may appear in Canada at a later date, as was apparent earlier with rising divorce rates.

The variables to be explored are the traditional variables which have historically been of central interest in different areas of demographic research. The antecedent variables are early marriage and early childbearing. The current variables are marital status, fertility, number of children, education, employment, occupation, income, and home ownership. Of previous studies that have applied these variables, Balakrishnan et al found that women with a higher level of education are more likely to delay early marriage and childbearing; Pool and Moore found, conversely, that it is early childbearing that deters education and work experience, and that female lone parents are likely to be both the influencing and influenced factors; Popay and Jones, examining the socio-economic variables, found that the low income situation of lone mothers results in poor housing and poor health.[12] In the present application of the specified variables, this study will build upon previous research while using an approach that is unique in terms of its theoretical foundation, its method of analysis, and in its comparative nature at the national level.

The theoretical background for this research is described in the next chapter. Chapter 3 provides a review of the literature relating to the area of family under study. The data sources, methodology and expectations for the study are discussed in Chapter 4. The following two chapters contain the analyses -- the retrospective and period cross-classifications in Chapter 5 and the loglinear analysis in Chapter 6. Chapter 7 provides the summary and final conclusions.

Notes

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CHAPTER 2

THEORETICAL BACKGROUND

The theoretical background for this study is based on the developmental perspective. Family development, as a conceptual framework for orienting research, was initiated in the 1930s in a unique attempt to describe and explain the process of family change. In later years, as changes in the family became more dramatic, the evolution of the perspective accelerated and from the 1950s onward placed the family in the forefront for research, theory and practice.[1]

The focal point of developmental theory is the notion of family life-cycle stages. The perspective's framework is eclectic, however, as it incorporated concepts from several existing approaches to family study, thus producing a unified frame of reference for the study of family in its own right. Contributions to the framework include: structural functionalism with its assumption that people's behaviour is governed, not by choice, but by laws, rules, regulations, and expectations of behaviour (learned within the family) that help to maintain a cohesive and stable society; systems theory which views the family as a semiclosed system of relationships, interaction, and interdependence among its members; symbolic interaction which focuses on role -- role taking, role playing and role differentiation; the political economy approach, derived from the work of Karl Marx, which assumes that attitudes, values, lifestyles, and relationships are largely determined by how people make their living; and the life-course perspective which meshes individual careers over the life span with family change and, at the same time, emphasizes the importance of the historical and social contexts of family change and development.[2] These rich and diverse ancestral origins help to explain the diffuse character of contemporary family-development theory.

In the earlier form of the developmental approach, families had been theorized to develop through a regular, ordered pattern of continuous stages such as family establishment, childbearing and expansion, child launching, and the post-parental or retirement years. This earlier theorizing was criticized for its static view of family development and for falsely assuming that all families pass through the same stages at the same time. It was noted, for instance, that families can be founded by childbirth; family careers can be truncated due to separation, divorce or widowhood; and, the timing of like-cycle events can vary due to early or late childbearing, early or late marriage, or other unusual events causing gaps between developmental stages.[3]

More recently, as the perspective expanded in scope, attention has been paid to the dynamics of family life-cycle stages. It is realized within the perspective that families are likely to experience stages of equilibrium and disequilibrium, with interstage periods of transition. Stages of disequilibrium may be resolved through the rewriting of role scripts and some family reorganization; however, when 'pileups' of stresses provoke major role changes, as through divorce, this critical transition ushers in major family reorganization and a new stage of family development -- namely, lone parenthood. Researchers now look to the periods of dynamic transition to find variables that truly describe the process of family change and its effects.

The developmental approach benefits from the use of retrospective interviewing or longitudinal data that target the entire family career. Also, when career development is impeded, as through truncation (e.g., separation, divorce or widowhood), it is important that developmentally functioning families be examined in order to establish a baseline for comparison. Further, it is important to draw comparisons between societies, first to determine whether the fundamental, or universal, aspects of the life-cycle stages persist and, second, to permit the analysis of variances which may occur due to demographic, cultural and socio-economic factors.[4]

The ultimate value of the dynamic family-development framework is its utility and flexibility in the analysis of real families. Mattessich and Hill point out that a schema is needed for the rapidly growing population of female lone-parent families. They advise that the career of lone-parent families may be meaningfully described by a set of stages which resembles, although it is not identical to, that of two-parent families.[5] As lone mothers and their dependent children are likely to face major economic constraints at critical points in the family career, comparing the life-cycle stages of lone and married mothers could produce important baseline data for policy makers.

Based on this theoretical background, the present study employs a **stage-transitional model** of family development for lone and married female parents. Female lone parents derive from the separated, divorced and widowed populations and also from single (never married) females who have experienced premarital childbearing. The model captures families from all origins and transitions.

In keeping with the requisites of developmental theory, the analysis will use retrospective interview data which was collected in two family history surveys -- one conducted in Canada in 1984 and the other in the United States in 1985. The variables to be used in the study were selected with the aim of fulfilling the objectives set forth in the previous chapter, although the analysis is necessarily restricted to only those variables collected in both surveys. These variables are: age, marital status, fertility, number of children, education, employment, occupation, income and home ownership. As noted in Chapter 1, the variables will be examined in terms of antecedent characteristics -- the early marriage and early childbearing variables which are theorized to influence female lone parenthood, and current characteristics -- the demographic and socio-economic variables which currently apply to the lone or married parent as reported at the time of the survey.

Another aspect of the analysis involves variables which are conceptualized as 'intermediate variables', variables that come between the antecedent and current characteristics -- namely, education and employment. The antecedent variables are theorized to negatively affect education and, in turn, employment which ultimately influences the current variables and the likelihood of becoming a lone parent. The theoretical sequence is:

Antecedent Variables	**Intermediate Variables**	**Current Variables**
early marriage/		demographic,
childbearing	education--------employment	socio-economic
		variables

The stage-transitional model focuses on, and ultimately compares, the family life-cycle development of female lone and married parents in Canada and the United States. In keeping with the principles of demography as well as developmental theory, the model incorporates both structure and process [6] -- the stages being the structure and the transitions being the process. Five family life-cycle stages for lone and married female parents, as well as the interstage transitions which affect family change, are illustrated in Figure 2.1. The antecedent, intermediate, and current demographic and socio-economic variables which influence, or are influenced by, the transitions are also demarcated.

Figure 2.1
Stage-Transitional Model of Family Life-Cycle Stages For Lone and Married Female Parents

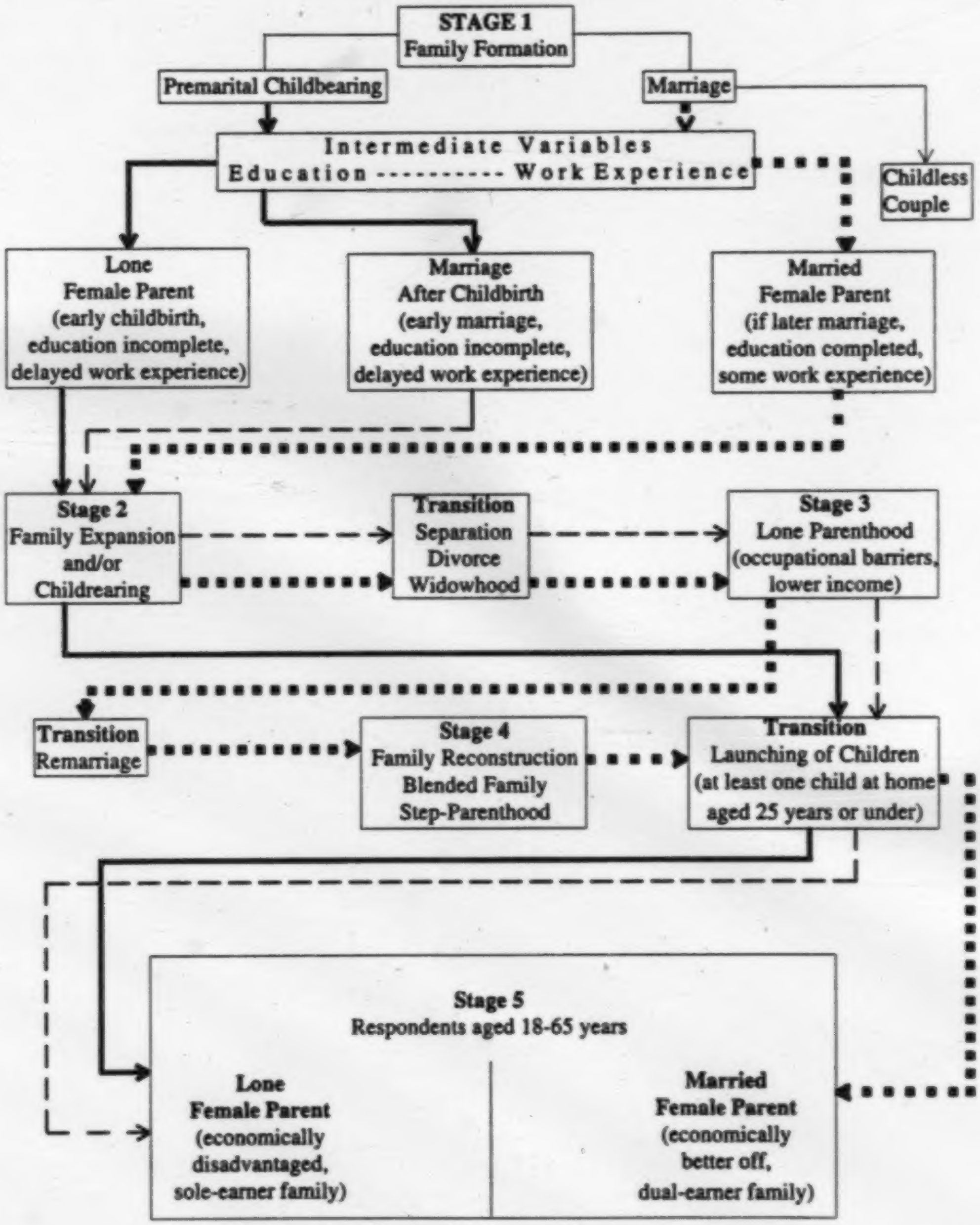
STAGE 1
Family Formation
Premarital Childbearing
Marriage
Intermediate Variables
Education ---------- Work Experience
Childless Couple
Lone Female Parent (early childbirth, education incomplete, delayed work experience)
Marriage After Childbirth (early marriage, education incomplete, delayed work experience)
Married Female Parent (if later marriage, education completed, some work experience)
Stage 2 Family Expansion and/or Childrearing
Transition Separation Divorce Widowhood
Stage 3 Lone Parenthood (occupational barriers, lower income)
Transition Remarriage
Stage 4 Family Reconstruction Blended Family Step-Parenthood
Transition Launching of Children (at least one child at home aged 25 years or under)
Stage 5
Respondents aged 18-65 years
Lone Female Parent (economically disadvantaged, sole-earner family)
Married Female Parent (economically better off, dual-earner family)

Figure 2.1 provides examples of the developmental routes female lone and married parents experience throughout their family life-cycle, which of course may vary by individual. The stages and interstage transitions of the model, as depicted in Figure 2.1, may be more succinctly outlined as follows.

Stage 1: family formation -- derives from premarital childbearing which is theorized to occur at an early age, and marriage which generally occurs at a later age;

Stage 2: family expansion and/or childrearing -- female lone parents would be likely to experience only childrearing;

Transition: due to separation, divorce or widowhood;

Stage 3: lone parenthood -- characterized by blocked or incomplete education, delayed work experience, occupational barriers, and lower income levels;

Transition: remarriage;

Stage 4: family reconstruction involving blended families and step-parenting -- this stage sometimes involves difficult adjustments and lower marital stability;

Transition: launching of children -- in this study at least one child aged 25 years or under must still be at home to conform with the definition of parent;

Stage 5: in this study this stage is the survey date at which time respondents were either lone or married female parents aged 18-65 years.

In summary, the family development theory to be used in this study assumes that:

1. female lone parenthood is a critical stage in the process of family life-cycle development;

2. the female lone-parent stage develops from:
   (a) premarital family formation (i.e., premarital childbearing),
   (b) a period of critical transition (i.e., separation, divorce, or widowhood);

3. the female lone-parent stage is likely to be characterized by social and economic disadvantages compared to the characteristics of married female parents.

It is these basic assumptions that will be addressed and tested in the following chapters.

Notes

[1] Mattessich, Paul and Reuben Hill, "Life Cycle and Family Development," in Marvin B. Sussman and Suzanne K. Steinmetz, eds. Handbook of Marriage and the Family. (New York: Plenum Press, 1987), 437.

[2] Baker, Maureen, "Introduction: Theories, Methods, and Concerns of Family Sociology," in Maureen Baker ed. Families: Changing Trends in Canada 2nd edition, (Toronto: McGraw-Hill Ryerson Limited, 1990), 9-12; and Mattessich and Hill, 437-440.

[3] Baker, 13-14; Mattessich and Hill, 460-61; and Rodgers, Roy, H., Family Interaction and Transaction: The Developmental Approach (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1973), 197-200.

[4] Mattessich and Hill, 455-465.

[5] Mattessich and Hill, 445-452.

[6] Teachman, Jay D., Karen A. Polonko and John Scanzoni, "Demography of the Family," in Handbook of Marriage and the Family, 3.

CHAPTER 3

REVIEW OF THE LITERATURE

The variables delineated in the previous chapter have been of central interest in social science studies since the 1960s. There has been a profusion of literature regarding 'women and work', 'the family in crisis' and 'the family transition'. The focus of this review is to examine the specified variables in relation to the evolution and characteristics of female lone-parent families in Canada and the United States.

Early Marriage

The aspect of early marriage pertinent to this study concerns its effect on education and employment and, ultimately, female lone parenthood. The negative correlation between age at marriage and educational attainment has been documented at least since 1958. Glick and Carter were among the first to examine this relationship.[1] While some have argued that early marriage and lower educational attainment are both consequences of lower social origins, others have proposed that early marriage acts independently to lower educational attainment.[2] Bayer found that marriage intentions have an independent influence on the educational aspirations of high school seniors, and that the direct effect is especially marked for females.[3] Marini adds that females who marry shortly after high school restrict the attainment of higher education. A similar effect was not evident for males, who typically marry at a later age.[4] Using 1971 Canada Census data, Balakrishnan et al found that women with a higher level of education tend to have a higher median age at marriage, irrespective of their age cohort. They sate that, "most probably, women who plan to go on to higher levels of education purposely delay marriage and childbearing, while the less educated people may have this situation curtailed by marriage and/or childbearing."[5] Similar findings were derived more recently in a Canadian study by Balakrishnan, Lapierre-Adamczyk and Krotki.[6]

Davis and Bumpass point out, however, that an increasing proportion of women are continuing their education after marriage -- over one-fifth of a (1970) national sample in the United States returned to high school or college to do so.[7] On the other hand, Bianchi and Spain state that early marriage is more detrimental to women's educational attainment than to men's. One American woman in three who dropped out of college in the 1960s did so to marry while just one man in ten did so. Further, the younger the age at marriage, the greater the detriment -- in 1980, fewer than four percent of American women who had married in their teens had finished four or more years of college while those who married at age 24 or 25 had the highest completion rates.[8]

The literature appears sparse regarding work experience and early marriage. This is because research has centred mainly on the strong relationship between education and employment, with the education antecedent preceding employment. Balakrishnan et al, however, note that "the average age of marriage for women who never worked is 18.3 years",[9] which could suggest that early marriage prevents or delays work force experience, although this association was not established in the study.

Early Childbearing

One of the most consistent characteristics discussed in the literature concerns the relationship between education and fertility. Most researchers agree that educational attainment affects fertility. Women with higher education have been found to marry later and postpone childbirth, thus accommodating their educational and career goals.[10]

Rindfuss, Bumpass and St. John found that the reciprocal relationship between education and age at first birth is dominated by the effect from education to age at first birth, with little effect in the other direction.[11] While the strong influence of education on childbirth is made abundantly clear in the literature, some researchers argue that the relationship occurs in the reverse -- that is, the age of mother at first childbirth deters educational attainment. Waite and Moore conclude that early childbearing is not only strongly and negatively associated with educational attainment, irrespective of important social, demographic and motivational factors, but it is likely to greatly diminish educational as well as the overall attainment of women.[12] Pool and Moore state that "early childbearing appears to be a block: the earlier the age at first birth, the less likely a woman will have gone on to achieve (higher) education".[13]

With respect to employment experience and early childbearing, Balakrishnan et al found that the fertility of females aged 15-24 who had never worked was almost double that of those who had worked in 1970 or 1971; they conclude that "the association between working women and delayed childbearing is apparent".[14] Results from the 1984 Canada Fertility survey reveal that "women who started working before age 22 had almost all their childbirths after they started work".[15] The literature mainly focuses, however, on the inter-relationship between education and labour force participation. Bianchi and Spain note that "the clearest consequence of higher education for women is that it increases the likelihood of participation in the labour force. The more highly educated the woman, the more likely she is to work outside the home, although the level of participation may vary with stage of life cycle".[16] Pool and Moore advise that early childbearing appears to block education which, in turn, delays work force experience.[17]

Marital Dissolution

Female lone-parent families derive from separation, divorce and widowhood. (Single {never married} mothers who have experienced pre-marital childbirth will not be discussed in this portion.) The first stage of marital dissolution is generally separation. The abundance of literature on divorce and scarcity of research on separation causes the picture of marital dissolution to be somewhat distorted. Raschke notes that marital separations occur more frequently than divorce (due to reconciliations) and can be just as problematic.[18] Cherlin states that:

> "Most married couples stop living together before they are legally divorced. Some remain separated -- without divorcing -- for an extended period or even for the rest of their lives. Others separate and then reconcile their differences and resume their marriages. Even for couples who eventually divorce, the process of moving into separate households may be more difficult and traumatic than subsequently obtaining a divorce ... Unlike marriage and divorce, which are always sanctioned by the state, many separations are informal arrangements between two spouses. Consequently, official records on legal separations, which are incomplete in any case, give an inadequate picture of the number of separations".[19]

Macklin and Rubin describe the time of separation, as distinguished from divorce, as the period of greatest stress resulting from employment, economic and legal concerns as well as concerns regarding children, family and friends.[20]

Using 1976 Census of Canada data, McVey and Robinson found that the proportion of population separated was equal to or exceeded the proportion divorced in every five-year age category commencing at age 15, with the proportional difference being greatest in the younger and older age groups. The authors conclude that reliance upon divorce statistics alone underestimates the magnitude of marital dissolution in Canada.[21]

No trend in the life of the North American family, however, has received more attention or caused more concern than the rising rate of divorce since the 1960s. The Canadian Divorce Acts of 1968 and 1985 and the American no-fault divorce legislation enacted in the 1970s, which in both cases made the divorce process easier, were concomitant with the increasing divorce rates and changing attitudes toward divorce occurring in each country.

In a comparative study of Canada and the United States, Robinson and McVey examine the relative contributions of death and divorce to marital dissolution. Their findings reveal that the trend in divorce rates for the two countries have been similar over the past 66 years, although the magnitude of the American rates have been consistently higher. While divorce has increased markedly in Canada, death continues to dissolve more marriages than does divorce. In contrast, divorce now dissolves more marriages per year than does the death of a spouse in the United States.[22] Divorce tends to occur at a different stage of family life than widowhood, so the two types of dissolution have different consequences. About half of all divorces occur by the seventh year of marriage when young, dependent children are still at home. In most cases, custody of the children is granted to the mother.[23]

An important aspect of marital dissolution pertinent to this study involves the correlates of divorce. The literature evidences a relationship between certain demographic and socio-economic characteristics and divorce. Studies indicate that early marriage, premarital pregnancy, less education, less (or less stable) income, lower-status occupations, and higher female labour force participation are all factors which may influence divorce.[24]

Ross and Sawhill examined the influence of wives' income on marital stability. They posited the 'income' effect and the 'independence' effect. Given the positive relationship between family income and marital stability, the 'income' effect assumes that the more wives contribute to the family income, the higher marital stability should be. The authors found, however, that the 'independence' effect was the stronger of the two -- that is, the higher the income of wives, the more likely they would be to leave an unsatisfactory marriage.[25] Cherlin states that this finding seems to depend on the husband-wife ratio -- the higher the wives' actual or potential earnings relative to the husbands' earnings, the greater the likelihood of separation.[26]

As the structural consequences of separation, divorce and widowhood are lone-parent families, it is important to examine the length of time that female parents remain in each state. Bumpass, Sweet and Martin found that the duration of separation is 7 years for American mothers with one or two children and 14 years for those with three or more children.[27] The duration of divorce before remarriage is about 3 years, according to the findings of Cherlin.[28] Mattessich and Hill concur with Cherlin regarding the duration of separation and add that, for widowed mothers aged 14-39 years, the duration of lone parenthood before remarriage is 4.2 years on average. The authors state that the widowed in this age group encounter lone parenthood about five years later than those who divorce before remarriage.[29]

Remarriage

While very little research had been done on remarriage before the 1970s, it is now considered an important path after divorce. Researchers concur that remarriage has become a basic aspect of our family experience. In earlier decades men and women remarrying were more likely to have been widowed than divorced, however, the increase in divorce in the 1960s along with declining mortality has changed this balance. Ambert states that 75% of divorced men and 66% of divorced women in Canada eventually remarry; [30] Cherlin found that the corresponding percentages for American men and women were 83% and 75%, respectively.[31]

The literature reveals that remarriage depends particularly on age at marital dissolution and whether children are present, although an inverse relationship also exists with education. Younger mothers with fewer children are more likely to remarry and are likely to do so rather quickly after divorce (within a median period of about 3 years). Further, women with less education (less than high school) are more likely to remarry than those with higher education (a college degree).[32] Ambert indicates that the pressures to remarry are particularly strong for the single parent existing on a low income.[33]

Divorce and remarriage have resulted in the 'blending' of families and step-parenting. Researchers have found that the presence of stepchildren in reconstituted families is related to lower marital stability as they may pose unusually difficult adjustments not normally found in first marriages. A number of studies reveal that the more complex family structures resulting from remarriage have experienced a higher rate of divorce than do first marriages.[34] Cherlin argues that the higher divorce rate for remarriage after divorce is "a consequence of the incomplete institutionalization of remarriage after divorce in our society". He adds that "the law ignores the special problems of families of remarriages after divorce".[35] On the other hand, Ambert states that "as divorce and remarriage become more common in Canada, attitudinal and social changes will also continue in order to adjust to this phenomenon. For instance, recent legal reforms have already brought significant alterations to the division of family assets after divorce".[36]

Fertility

The literature on fertility trends in Canada and the United States pays particular attention to first, the all-time high which occurred following World War II and second, to the current all-time low, which appears to be in line with the longer historical trend.[37] Cherlin states that "during the 1950s women were having their first child earlier in their lives, and subsequent children were born closer together; after 1960 women had their first birth at a later age and spaced subsequent children further apart" -- thus resulting in the baby boom and baby bust generations.[38]

Easterlin proposes an explanation for historical changes in fertility rates. According to his theory, lifestyle aspirations are formed at an early age based on the income of one's parents. As cohorts reach adulthood and enter the labour force, their own income will match, exceed, or fall below that needed to sustain these aspirations. If their "relative income" is high in relation to their aspirations, they will feel freer to marry and have children; if it does not, they will feel economic stress and hesitate to marry and have children.

Easterlin also proposes that relative cohort size is a determinant of relative income. He contrasts those born during low birth rate periods (the 1930s) with those born during high birth rate periods (the 1950s). The former encountered favourable labour market conditions and responded by having larger families (producing the baby boom). The larger baby boom cohort, however, suffered adverse labour market conditions and responded by having fewer children (producing the baby bust).[39]

There is some disagreement regarding Easterlin's theory. One criticism concerns his emphasis on the income and employment opportunities of men, which "ignores the role of women in the childbearing decision-making process, as well as the importance of recent changes in women's labor force participation and perceived opportunity costs to childbearing".[40]

Miller states that specific marital and family events directly affect childbearing -- namely, age at marriage, separation, divorce, widowhood and remarriage. The three forms of marital dissolution reduce fertility by taking women out of acceptable unions for childbearing.[41] With remarriage, women are transferred back into a high fertility status. Thornton states that remarried women have as many or more children altogether as those in stable marriages.[42] Age at marriage affects childbearing through an inverse relationship -- the younger the age at marriage, the higher the fertility. Hofferth and Moore found that early childbearers have larger families, complete less schooling and obtain less work experience; consequently, they have lower earnings, fewer resources to distribute among more family members, and are more likely to live in poverty.[43]

Studies also reveal that teenage and, particularly, premarital pregnancies present special problems for the individual as well as society. Young women in this situation reach their early twenties already enmeshed in the responsibilities of caring for a family above average in size, limiting their pursuit of other options which might compete with childbearing.[44]

On the other side of the coin, Hofferth found that later age at marriage, delayed childbearing and small family size are associated with higher income and a higher standard of living.[45] In either case, most researchers agree that it is the effect of these marital and premarital events on fertility which ultimately determines completed family size and socio-economic well-being.

Education

Over three-quarters of men and women in Canada and the United States have attained secondary schooling. The literature therefore refers to the population aged 25 years and over with a university/college degree as a general measure of educational attainment.

As recently as 1960 only 1.9% of Canadian adult women had a university degree compared to 4.9% of adult men;[46] for the United States the corresponding percentages are 6% and 10%, respectively.[47] During the 1970s, women in both countries made striking gains relative to men in post-secondary enrollment and attainment. In the 1980s, Canadian women accounted for 40% of the graduate students while, in the United States, 50% of the graduates were women; for the first time in American history the enrollment rates for women equalled those for men.[48]

Bianchi and Spain note the many inherent values of higher education for women. A college degree is becoming increasingly necessary to compete in the economy, making it important for women to improve their educational attainment in order to compete in the job market. Higher education also means higher income, and the relative improvement in educational attainment for women has the potential to reduce the wage difference between men and women. The literature reveals, however, that the content of post-secondary education has remained different for men and women. A higher proportion of Canadian and American women are concentrated in the 'traditional' fields -- that is, the humanities, fine and applied arts, and the health sciences while proportionately more men major in the physical sciences and engineering. In addition, women are less likely than men to seek professional and doctoral degrees, although the proportion of higher degrees awarded to Canadian and American women has increased greatly in the past decade.[49]

The literature points out that women's increased pursuit of higher education is one of the consequences of what has been termed the 'sex role revolution' which occurred in this period; the period is also marked by delayed marriage and childbearing, higher divorce rates, and increased female labour force participation. Researchers suggest that these transitions were accompanied by attitudinal changes in the 1960s and 1970s -- changes in attitudes concerning divorce and the value of advanced education for women.[50]

Bianchi and Spain add that the educational attainment of women, coinciding with delayed marriage and childbearing, brought more independent life-styles for young adult women. It became possible to link schooling decisions and the family roles of women to the work roles of women. On the other hand, marriage and childbearing at an early age tend to be incompatible with higher education. Young wives and mothers are therefore at risk of educational and labour force disadvantages. The literature indicates that such disadvantages for women are also reflected in the 'negotiating' and 'bargaining' power within marriages.

The theory of family power, as described by Szinovacy, assumes that family members occupy ascribed and achieved social positions and roles that partially define their intrafamilial control potential. The husband, as the primary family provider, has been theorized to hold the strongest power base, although some argue that this basis for the husband's 'traditional' power position has been overemphasized. Nevertheless, the economic dependence of wives on their husband has been singled out as the most important barrier to wive's equality in marital relations.[51] In marital negotiating and decision-making, it is postulated that the partner who controls the most appropriate resources (material and non-material) is likely to exercise the most power. Education and occupation are therefore important factors because the spouse contributing the most to family income is likely to play the key role.[52] The family is thus perceived as 'a system in conflict'. Power struggles and power exertion represent a 'normal' feature of family life and renders families prone to frequent and intensive conflict. Conflict per se, therefore, is not problemtic, but the nature and type of specific conflicts may influence family stability and members' satisfaction'.[53] The implications of the educational attainment of women are many faceted.

Employment

Canadian and American researchers have traced the pattern of female employment over the past century. Ostry states that just 14% of Canadian adult women were labour force participants at the turn of the century compared to nearly 30% by 1961; Bianchi and Spain state the corresponding percentages for the United States are 20% and 38%, respectively.[54] By 1981, about half of married females in Canada and the United States were employed; by 1991, in both countries, well over half of married women with children present at home were employed or actively seeking employment.[55]

Women born before the turn of the century generally had their highest rates of labour force participation at the youngest ages, then left the labour force after marriage and did not return. During the 1950s in the United States and the 1960s in Canada, female participation was characterized by a two-peaked or bimodal pattern (although the American rates were substantially higher than those for Canada). This M-shaped pattern reflects the nature of female participation -- the participation of single or married women at young ages, their withdrawal from employment during childbearing and childrearing and, finally, their return to the labour market at later ages. The literature indicates, however, that women born after World War II appear to be generating a new profile of employment throughout their life course. The more recent birth cohorts have increased their employment at all ages; hence, the M-shaped pattern is gradually smoothing out to a more continuous participation curve similar to that of males.[56]

The employment of married women rose sharply following World War II; since the 1960s, the striking increase in the proportion employed in their childbearing years is well documented. Researchers link the 'revolution' in female labour force participation with other marked changes which were occurring concomitantly -- most importantly, delayed age at marriage and childbearing, women's advances in higher education, higher divorce rates and more liberalized attitudes toward divorce and women's roles.

The inverse relationship between fertility and women's employment is acknowledged throughout the literature, but considerable efforts are still being made to understand the causal processes involved. Does employment reduce fertility or does fertility curtail employment? Most scholars agree that there is some degree of mutual causation in the relationship between employment and fertility. Cramer concludes that, in the short run, fertility has a large impact on employment while, in the long run, years of employment also have a substantial effect on fertility behaviour. The short term effect (the effect of employment before childbirth on subsequent employment) "diminishes over time as intervening events and contingencies become more common and more important".[57] Miller states:

> "At the sociological level, changes in women's roles (higher education and employment) seem likely to reduce aggregate fertility, but at the personal level, the reverse is also true -- fertility experiences have powerful effects on whatever else women do in life". [58]

Miller notes, however, that there are important exceptions to the generally observed inverse relationship between employment and fertility. In low socio-economic groups, for example, women work out of necessity and, in this case, employment is not necessarily accompanied by the desire for fewer children and smaller completed family size.

Easterlin posits another explanation for delayed marriage and childbearing and the movement of wives into the labour force. He argues that recent developments concerning fertility and women's employment have a common cause -- "decreased relative income of young adults resulting from increased generation size". When the large numbers of young men of the baby boom reached working-age in the 1960s and 1970s, they found increased competition in the labour market and had to settle for employment which did not meet their preformed 'relative income' aspirations. Consequently, young married couples postponed having children and young wives entered the labour market to supplement the family income.[59]

The literature also discusses a demographic event -- the marriage squeeze -- which contributed to delayed marriage and childbearing and, possibly, female labour force participation. A marriage squeeze occurs when there is an imbalance between sexes in the relevant age groups -- that is, when there is a deficiency in the number of eligible males or females. In the 1960s and 1970s, females of the large baby boom cohort were faced with a shortage of marriageable males -- males about two years older than themselves (as prescribed by the mating gradient norms of our society). One alternative was to delay marriage which, in turn, facilitated entry into the labour market.[60]

The literature acknowledges that higher education is the clearest determinant of increased female employment. Bianchi and Spain state that the 'cost' of staying home is greater for a college-educated woman than for a woman with a high school diploma because those highly educated usually have more occupational choices and obtain higher wages.[61] One issue that has arisen, however, is whether or not the continuity of labour force attachment over the life course has increased for women. Masnik and Bane point out that female participation does not necessarily imply full-time continuous employment and that high participation rates "can mask wide fluctuations in work schedules to accommodate childcare".[62]

Family sociologists discuss divorce as both a cause and an effect of female employment. The most dramatic increase in labour force participation has been among young, married women. Younger women are more likely to divorce than older women, and employed married women consider divorce as an option more often than unemployed married women. While the wife's employment is not a direct cause of divorce, it does provide women with a resource (income) which is considered to be a key element of conjugal power [63] as well as an economic alternative to an unhappy marriage.[64] On the effect side, one consequence of divorce is lone motherhood. These mothers, although ill prepared in terms of education and job skills, enter the labour market out of economic necessity only to be relegated into lower paying jobs.[65]

In view of the revolutionary changes occurring with respect to female roles, the literature points to a new family type emerging which will be egalitarian -- that is, the dual-earner family along with equal access for men and women to the labour market.[66]

Occupation

The traditional 'female occupations' have expanded tremendously over the past century in Canada and the United States. Oppenheimer developed a framework to explain this phenomenon. She argues that World War II created a greater need for female workers and the following period of increased economic growth created many more jobs typically filled by women (e.g., teachers, nurses, secretaries). The increased demand for female workers could first be met by the supply of young single women. While this type of female worker was preferred by employers and supported by the prevailing norms, a shortage developed as young women of the 1950s married and started their families earlier. To meet the demand, older women first moved into the labour force, followed by younger married women with children. Consequently, the expansion of the 'female occupations', particularly involving married women, reflects the increase in demand for female labour as well as the changing supply of female labour by age and marital status.[67]

The literature indicates that occupational segregation by sex has changed very little over this century. While female participation in the labour force has increased dramatically, women are still disproportionately concentrated in white-collar occupations. Over the past decade, in both Canada and the United States, women have remained dominant in the professional and technical, clerical, sales, and service occupations. Women's dominance in the professional and service occupations is due to their greater numbers in the social sciences, teaching, and medical and health occupations. Authors for both countries note, however, that women have increased their representation in the managerial and administrative occupations. While some movement of women into male-dominated occupational spheres has occurred, the reverse has not occurred -- men have not pursued jobs typically filled by women.[68] With respect to female parent type, a Canadian study found very little difference between the occupations of lone female parents compared to those of married female parents.[69]

Income

The literature on the income of females particularly addresses the issue of male-female wage differentials. Bianchi and Spain note that, since 1955 in the United States, the annual earnings of women have averaged between 57 % and 64% of those for men. By 1983, females' earnings averaged 64% of those for males, the same as in 1955.[70] Similar data for Canada have been noted. McVey and Kalbach state that, in 1990, women's median total income was only 53% of that for males; when examining the employment income for only those who worked full-time for a full year (1986), the average for females was 66% of that for males.[71]

Reasons for the earnings gap between men and women in Canada and the United States are documented as follows: the labour force participation of women, although having significantly increased, still lags behind that of men; women are more likely to be employed part-time; because women's labour force attachment is not as continuous as that of men, they have less work experience and enter lower paying types of traditionally female occupations; in sum, women's choices concerning family roles and childrearing responsibilities constrain their employment choices.[72]

Family income is affected by female labour force participation and divorce. Burch and McQuillan discuss how increased labour force participation on the part of women has produced the dual-earner family, and how higher divorce rates have resulted in the growth of female lone-parent families, or sole-earner families. (The authors also note that the fastest-growing group of female lone-parent families derives from the never-married population, which also contributes to the proportion of sole-earner families.) It was found that the real income of all Canadian families rose by almost one-third between 1971 and 1986 and about one-quarter of this increase was due to the rise in the number of earners per family. As female lone-parent families have experienced no increase in the number of earners, the authors state that this is almost the sole cause of the growing income gap between husband-wife families and female lone-parent families.[73]

The American literature concurs that income growth in female lone-parent families has fallen far behind that of two-parent families. Gongla et al state that lone mothers are over three times more likely than lone fathers and six times more likely than two-parent families to have an income below the poverty threshold. American sociologists also indicate that the major explanation for the income differential between one- and two-parent families lies in the effects of marital dissolution. A sizable reduction in family income generally follows dissolution and, in recent years, the size of the reduction has become more severe, even with the addition of welfare funds. In 1978, divorced mothers experienced a 43% drop in income, separated mothers a 51% drop, and it is expected that never-married mothers would be worse off, on average, due to their younger age and lower education. The economic status of lone-parents is further affected by low and irregular child-support payments. The authors add that major social factors may affect lone mothers' economic status. Examples include the low status of women in the work force, the general organization of work in our society which does not promote flexible working hours as an option, and lack of resources to obtain childcare.[74]

Social scientists advise that contemporary poverty in the United States has become concentrated in families maintained by a women.[75] Moreover, the low income-potential of lone mothers usually occurs at a time in the family cycle when young dependent children require the most care and family expenses are high. When examining the relationship between income, home ownership and health, Popay and Jones found an additional socio-economic burden for lone mothers. The authors report that lone mothers are more likely to have lower incomes and less likely to own their home than lone fathers. Also, lone mothers living on low incomes in poor (subsidized) housing are more likely than married mothers to experience poor health.[76]

Family Transitions

The variables discussed above either affect or are affected by family-life transitions. In order to describe and explain the family-related events that play a role in these transitions, family specialists have employed two different approaches: the family life-cycle model and the life-course model.

As described by Teachman et al, the family life-cycle concept has been associated with family demography since the turn of the century. In its earlier form, it was constructed as a varying number of predetermined stages that characterize the development of family units, i.e., marriage, childbearing, childrearing, and dissolution through the death of a spouse. It measured role changes in the family unit as it moved from stage to stage over the life of its members. Demography, however, seeks to describe and explain both structure and process -- structure referring to a set of statuses with associated roles that are important to the functioning of society, and process referring to the occurrence of (relatively) discrete, observable events that serve to alter previous structure. With the family undergoing marked changes in more recent decades, the family life-cycle approach was later combined with the concept of birth cohort or marriage cohort, and was expanded to include interrelationships with a variety of related life-cycle processes, such as schooling and employment, thus making it a more convenient mechanism for studying changes in family structure and process.[77]

The concept of family-life cycle has, nevertheless, been criticized for being overly rigid in its delineation of *a priori* developmental stages. Hareven argues that the concept neglects temporal features -- family variations associated with differential timing, as well as the spacing and duration of events. She claims the life-course perspective is preferable as it focuses on the meshing of individual careers over the life span with family change over time, and predetermined stages are not assumed. The life-course analysis has three essential features: the synchronization of the individual with family transitions; the interaction between life-course transitions and historical change; and, ultimately, the cumulative impact of earlier life-course transitions on subsequent ones. The author states that the crucial issue for historians is how to use the life-course perspective. At its best it depends on the reconstruction of individual and family careers over enter lives and across generations.[78] Vinovskis and McCall advise that family life-cycle models are easier to describe and follow as they consist of only a few stages while the life-course model is more difficult to use as it is a less specific prescription for analysis.[79] Waite found the life cycle a valuable concept in studying the labour force participation of married women. The most important determinants of married women's labour force involvement was found to depend on life-cycle stage. The author adds that events which do not fit into current definitions of the life cycle, i.e., childlessness, divorce, remarriage, and lone-parent households, should be incorporated.[80]

Mattessich and Hill describe the growth and development of the family life-cycle concept. Following its inception is the 1930s and accelerated evolution in the 1950s, the family life- cycle concept underwent many years of research by scholars from diverse approaches to the study of family. From this work, a unified frame of reference solely for the study of family evolved -- the family development perspective. The developmental perspective provides the theoretical framework for orienting research -- for analysing the structure and process involved in family transitions. The perspective's focal point is the sequence of stages precipitated internally by the demands of family members as well as externally by the larger society. It is this focal point which distinguishes the developmental approach from other perspectives but, it is this focal point that produces an affinity between family development (research and theory concerning the life cycle of families) and life-course analysis (theory and research concerning the life cycle of individuals).[81]

Mattessich and Hill posit that the newer family development perspective with characteristics from six diverse ancestral origins provides a dynamic theoretical framework for the analysis of real families. The advantage of the schema is that it can be applied to the modal career of the nuclear family as well as to families that depart from the modal course, and "the new category for which the course of development over the life span demands attention is the female-maintained family".[82]

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CHAPTER 4

THE DATA, METHOD, and EXPECTATIONS

The object of this study, as set forth in Chapters 1 and 2, is to examine the relationship between particular variables and the propensity for female lone parenthood. The selected variables will be examined in terms of two basic characteristics -- the 'antecedent' characteristics (those theorized to predispose female lone parenthood), and the 'current' characteristics (those possessed by female parents as stated at the time of the survey). In nontechnical terms, the relationship between these characteristics could be viewed as one of cause and effect, with the antecedents representing the causal variables and the current characteristics representing the effects.

The analysis is essentially comparative -- that is, the propensity for female lone parenthood will be estimated through comparisons with female married parents and, in particular instances, the current characteristics will be compared with male lone parents as well. Cross cultural comparisons between Canada and the United States will also be carried out where data sources permit.

The Data

The data for the study are derived from two sources -- the Canadian Family History Survey conducted by Statistics Canada in February, 1984, and the American Marital History and Fertility Survey conducted by the United States Bureau of the Census in June, 1985.

The Canadian survey was a supplement to the Labour Force Survey which is conducted monthly in Canada in order to estimate the labour force characteristics of the working-age population. The Family History Survey is a subsample of the Labour Force Survey but contains information on persons 18 to 65 years of age only. It did not include persons aged 15 to 17 due to the fact that the frequency of the events being surveyed would have been extremely low in this group and also due to the potential sensitivity of some of the questions. The survey also excluded: residents of the Yukon and Northwest Territories; armed forces; residents of Indian reserves; inmates of institutions; and foreign diplomats. These exclusions represent approximately 2% of the Canadian population. As the interviews, conducted in the week following the labour force survey, were by telephone, they necessarily excluded persons who did not have telephones, representing about 2% of the sample. This sampling resulted in the selection of just over 16,000 individuals. A non-response rate of 12.7% lowered the usable sample to 14,004.[1]

The American survey was a supplement to the Current Population Survey which is equivalent to the Canadian Labour Force Survey and is conducted, similarly, on a monthly basis in the United States. The universe consists of all persons in the civilian noninstitutional population of the United States living in households. The Current Population data set is divided into three parts: the adult file which contains information on labour force and other personal characteristics of persons aged 14 years and over, the file on children aged 0-13 years, and the marital history and fertility file which contains marital history information on ever-married females aged 15 years and over and fertility information on all females aged 18 and over. The three files are linked enabling data on one file to be combined with that from another file; for example, labour force characteristics on the adult file may be combined with lone parent data on the marital history file. The master file contains information on 156,000 persons; the basic sample for the present study was drawn from this total number of records.[2]

The Canadian and American data sets offer important advantages. First and foremost, they permit comparisons to be made at the national level. Such comparisons are useful in revealing the similarities and differences in demographic and socio-economic trends. Some trends occurring in the United States at one point in time may appear in Canada at a later point in time, and in some cases the cultural gap between the two countries has been revealed to narrow over time. For example, the cultural difference reflected in the divorce rate differential of the 1950s is revealed to have narrowed considerably by the 1970s[3] which, in turn, would have an effect on existing differentials regarding lone parent families in each country. Further, based on the many cultural similarities now observable in Canada and the United States, the comparisons may permit generalizations to be drawn from one country to the other in cases where the data sources do not provide a direct or complete data match. Another important feature of both the Canadian and American surveys is their retrospective nature and facility to collect historical data. This feature of the data files provides the opportunity to explore various aspects of family life-cycle events, and to examine both antecedent and current characteristics.

One limitation of the data files stems from the fact that neither survey was designed to collect information on female lone parents per se. This necessitates a finer disaggregation of the data, e.g., by parent type, and a more complex data base from which to eke out the desired information. A second limitation inherent in the data sources relates to the selection of variables pertinent to the study. Variables that could be useful in the comparisons, such as religion, ethnicity, and particularly health, were not collected in either survey and are therefore restricted from the analysis.

Method

In preparation for the analysis, parent type -- the dependent variable, must first be identified. Female lone parents are defined as single (never married), separated, divorced or widowed females with at least one child aged 25 or under present at home. Female married parents are defined as females with a spouse or common-law partner and with at least one child aged 25 or under present at home. These definitions are applied similarly to male parents. The Canadian sample contains 7,392 parents -- 3,970 mothers and 3,422 fathers. The American sample contains 26,237 parents -- 13,730 mothers and 12,507 fathers.[4] The female parent group exceeds that of male parents in both the Canadian and American samples. This is largely due to the fact that female lone parents are over represented in both samples.[5] A 100% subsample of parents from each data set is used in the analysis.

As noted above, the retrospective nature of the data allows the variables selected from the samples to be examined with respect to past and present events, or by antecedent and current characteristics. The antecedent independent variables selected are early marriage and early childbearing (in both cases before age 20). In accordance with the theoretical framework outlined in Chapter 2, the two antecedent variables are expected to deter educational attainment and delay work force experience and these forces, in turn, are expected to have a determining effect on female lone parenthood. The latter two variables, although perceived to be part of the antecedent chain, occur between the antecedent and current variables and are therefore conceptualized as intermediate variables.[6] The current independent variables (those present at the time of the survey) are: current marital status, fertility, number of children, education, employment, occupation, income, number of earners and home ownership. As the analysis is essentially comparative, it is necessarily restricted to those variables contained in both the Canadian and American samples that are comparable. On the other hand, based on the objectives of this research, the variables selected are of central importance in revealing the demographic and socio-economic characteristics of female lone parents compared to female married parents.

In retrospective studies data are obtained in surveys from respondents who "recall experiences at a series of earlier dates or ages pertinent to the topic under consideration".[7] Such studies are, in fact, a type or source of cohort data. In this study, for example, the cohort consists of lone or married female parents who experienced a particular demographic event, such as child birth, marriage or divorce, at the same age (before age 20). On the other hand, period analysis provides a current 'picture' with respect to some event or characteristic which is observed during a specified time interval, such as one year. In this case the socio-economic characteristics of lone and married female parents are observed in Canada and the United States in the year 1984 and 1985, respectively.

One disadvantage of retrospective studies is that the cohort experience may be complete for some respondents but incomplete for others, thus leaving certain aspects of the analysis incomplete as well. Also, recall lapse, involving the timing of events, and differential mortality are potential problems. An important advantage, however, is that the historical data shed light on some of the interacting factors which affect the period data. The period data, in turn, reveal a 'snapshot' of the current events and characteristics which may be of direct interest to the research problem. Hence, the two forms of analysis in combination provide a better understanding and fuller explanation of the changes occurring in the demographic events and characteristics under study.[8]

The analysis is presented in two parts. The first portion focuses on the cross-classification analysis; a logit model is then applied in the second portion. The two methods of analysis are discussed below.

Cross-Classification Analysis

The cross-classification table used in the analysis is described by Agresti and Finlay as "one of the most useful tools for the bivariate or multivariate analysis of nominal and ordinal data."[9] Such tables elucidate the nature of the relations between variables, permit the reacher to control variables, thus unmasking spurious or intervening relationships, and to organize data in a convenient form for further statistical analysis.[10] Babbie adds that, while these tables are very common in social research, "their seeming simplicity is deceptive" as they "contain within them the basic logic of explanatory data analysis".[11]

In this analysis, multivariate percentage tables are constructed to examine the relationship of the antecedent and current independent variables (specified above) with female lone (or married) parents, the dependent variable. The antecedent relationships are, of course, revealed in the retrospective portion of the analysis and the current relationships in the period analysis.

The comparisons between the parent types in each country and between the two countries are presented, as noted, in percentage distributions. This format is used because of the marked difference in sample size (the United States sample is three and a half times larger than that for Canada) and to facilitate meaningful interpretation. A weighting variable is provided in each data set. In the final computations this factor is added, thus weighting each sample to the total population of parents by type in each country, in accordance with population estimates at the time of the surveys.

Loglinear Analysis

Loglinear analysis assumes three forms. The logistic regression model, formulated for interval-scale independent variables, the logit model, formulated for categorical independent variables, both of which require a categorical dependent variable, and the more general loglinear model which does not require a dependent variable. The purpose of this analysis is to examine the relationship between a set of categorical independent variables (antecedent and current) and a categorical dependent variable (female parents). Considering this purpose, the logit model is selected as the appropriate method of analysis.

The logit model is similar to the regression model in the sense that both types express a dependent variable in terms of independent variables.[12] Standard linear regression, however, models the mean of the dependent variable while the dichotomous dependent variable requires that a special case of the mean be calculated. In this analysis, for example, the dichotomous dependent variable, female parent, could be scored (0) for married parent and (1) for lone parent. The sum of the scores is then the sum of the female lone parent responses. The mean of the (0) and (1) scores, which is the sum divided by the sample size, is simply the proportion of female lone parent responses. In other words, "a proportion is the special case of a mean calculated for a dichotomous variable having a (0, 1) scoring".[13] In this analysis the logit therefore models how the proportion of responses in one of the two categories (i.e., female lone parent=1) depends on the independent variables.

Now returning to the comparison between regression and the logit model, while the linear model produces predicted values in the $(-\infty,\infty)$ range, logit model predictions are necessarily restricted to the (0,1) range. In this case, inference assumptions break down "since the dichotomous response distributions are drastically different from normal distributions with constant standard deviation".[14] A logit transformation is therefore applied producing a linear relationship.[15] A basic logit (transformation) model is described by the equation

$$\log[\pi/(1-\pi)] = \mu + \lambda^{A}_{i} + \lambda^{B}_{j}$$

where: $\log[\pi/(1-\pi)]$ = the transformation, or logit, log being the natural logarithm, base e, and the ratio, $\pi/(1-\pi)$, denoting the probability of response (1) on the dependent variable when A is at level *i* and B is at level *j*

μ = the overall average of the logit for all combinations of A and B

λ^{A}_{i} = the effect of being classified in level *i* of variable A

λ^{B}_{j} = the effect of being classified in level *j* of variable B.

Using the response curves, in accordance with the equation above, the predicated probability of a 1 response falls between 0 and 1 for all possible values of X. As π increases from 0 to 1, the logit increases from $-\infty$ to ∞. The probability $\pi = \frac{1}{2}$ corresponds to a logit of 0, and π values above (below) $\frac{1}{2}$ correspond to positive (negative) logits. Further, each lambda parameter must sum to 0 across the categories of a variable so that $\sum_i \lambda^A_i = 0$ and $\sum_j \lambda^B_j = 0$. For example, if variable A has two categories, and if $\lambda^A_1 = 2.5$, then $\lambda^A_2 = -2.5$; hence, classification in the first category would have a positive effect on the logit.

As with the regression model, the logit model implies that both independent variables have an effect on the dependent variable, but it also assumes that there is no interaction. That is, "the logit model assumes that the effect of A on the dependent variable is the same at all levels of B, and the effect of B on the dependent variable is the same at all levels of A".[16]

Another feature of the multinomial logit model is the inclusion of a constant term for the dependent variable. There is a separate constant term for each combination of levels of the independent variables.

The starting point in fitting the logit is to first use a saturated model in order to remove the nonsignificant effects and to explore other models that may represent the data. A custom (unsaturated) model may then be fitted with an aim toward parsimony. "A model should fit the data, be substantively interpretable and as simple (parsimonious) as possible".[17]

The adequacy of the model can be observed in the Z-values and in the residuals (values produced in the computer output). The Z-value is the ratio of the parameter estimate to its standard error. If the model fits the data, the standardized lambda is approximately normally distributed with a mean of zero and a standard deviation of one; therefore, lambdas with Z-values greater than 1.96 (2) in absolute value can be considered significant at the .05 level. Residuals (the difference between the observed and expected count) in standardized form are approximately normally distributed; in this case, values greater than 1.96 or less than -1.96 suggest discrepancies since they are unlikely to occur if the model is adequate. Residuals then should be small and also show no discernable pattern. A third criterion of model adequacy can be observed in the 95% confidence interval. If the interval for a parameter estimate does not include zero, the hypothesis that the population value is zero can be rejected, indicating that the estimate is acceptable.

An important feature of loglinear analysis involves the use of interaction terms. "Interaction parameters indicate how much difference there is between the sums of the effects of the variables taken individually and collectively. They represent the 'boost' or 'interference' associated with particular combinations of values".[18] If the combined values increase the effect, the value of the interaction parameter is positive, if there is a decrease the value is negative, and with no effect it is zero.

This leads to a point concerning positive and negative results, disregarding interaction terms. Positive values occur when the average number of cases in a row or a column exceeds the overall average. In this analysis, for example, the number of married female parents far exceeds the number of female lone parents in both the Canadian and American data sets. It can generally be expected that positive values will represent married mothers while the values for lone mothers will be negative, reflecting the disproportionate representation.

With respect to interpretation, the odds ratio is the most appropriate measure of association for interpreting logit models. The odds ratio is simply the ratio of the probability that an event or characteristic will occur to the probability that it will not occur. The odds are first calculated from the frequencies, the log of the odds is then modelled producing what is termed the logit. An odds of 1 corresponds to a log odds of 0, since the natural logarithm of 1 is 0. As it is easier to interpret in odds than log odds, the log odds may be converted to odds by applying the exponential (antilog) function.[19] Log odds are additive while antilogs are multiplicative. This analysis will use log odd ratios to construct tables comparing female lone with female married parents based on the antecedent and current characteristics previously specified. Separate tables will be constructed for Canada and the United States.

Goodness of-fit-statistics. The statistics that will be used to test the hypothesis that a particular model fits the data are the Pearson chi-square calculated as

$$\chi^2 = \sum (f_o - f_e)^2 / f_e$$

and the likelihood-ratio chi-square calculated as

$$G^2 = 2\sum f_o \log (f_o/f_e)$$

where: f_o equals the observed frequency in each cell and
f_e equals the expected frequency in each cell.

The chi-square statistic, in each case, compares the observed frequencies to the expected frequencies (numbers that have the same row and column totals but satisfy the independence model). The discrepancies are summarized by the chi-square statistic, with larger differences between the observed and expected frequencies leading to larger values of the statistic and more evidence that the model is inadequate. If the model truly holds, both these statistics have approximate chi-square distributions; in this case, chi-square will be small and the value for the significance level will be large.

For large samples the two statistics are equivalent. The Pearson statistic is generally preferred when the sample is rather small. The likelihood-ratio statistic is preferred when many of the expected counts are small in value; it is also useful for comparing the fit of various models.[20] The significance level for the two chi-square statistics will be provided on the tables.

Measures of dispersion and association. The two measures of dispersion and association used in the analysis are Shannon's entropy measure calculated as

$$H = -\sum p_j \log p_j$$

and Gini's concentration measure calculated as

$$C = 1 - \sum p_j^2 .$$

The entropy measure is similar to the uncertainty coefficient. It varies between 0 and 1 -- 0 when there is no association (independence) and 1 when all of the variance in the dependent variable is explained. The concentration measure is the square of Kendall's tau-b. It examines every possible pair of cases in the table checking for concordance or discordance. When all cases fall along the major diagonal it takes on the value of 1 while 0 indicates no association.

When using either of the two measures, the total dispersion of the dependent variable can be subdivided into the dispersion explained by the model and the residual (or unexplained) dispersion. Magidson discuses how these measures are qualitative analogs to the usual R^2 statistic in quantitative regression analysis.[21] It is noted, however, that using the measures similarly to R^2 may be misleading as they are typically smaller in magnitude than R^2 and may be small even when the variables under study are strongly related.[22]

The analyses are presented in the following two chapters. In Chapter 5, the retrospective and period cross-classifications will elucidate relationships that exist between the independent and dependent variables. In Chapter 6 the logit model is expected to uncover more complex relationships and provide estimates of the effects of the independent variables on the dependent variable.

Expectations

On the basis of the objectives, theoretical framework and available data previously specified, the following hypotheses represent the expected outcomes for the study.

Antecedent Characteristics

1. A larger proportion of lone mothers compared to married mothers is expected to have experienced childbearing at an early age (before age 20).
2. A larger proportion of lone mothers compared to married mothers is expected to have experienced marriage at an early age (before age 20 and 25 years).
3. Of female parents who have experienced early childbirth/marriage (before ages 20 and 25) and have 'some' post-secondary education, a smaller proportion of lone than married mothers is expected to have attained some post-secondary (indicating dettered educational attainment in relation to early childbearing/ marriage).
4. A larger proportion of lone mothers compared to married mothers is expected to have experienced a first birth/marriage before they started working (indicating delayed work force experience in relation to first childbirth/marriage).

Currents Characteristics

1. The lone-parent stage is expected to occur at critical points in the family-life cycle, particularly affecting the 18-25 age group of single (never married)

mothers with infants and the 30-49 age group of separated or divorced mothers with dependent school-age children. Further, the lone-parent stage is expected to be of substantial duration (5 or more years).

2. A greater proportion of lone than married mothers is expected to experience one or more periods of critical transition (i.e., separation or divorce), although a smaller proportion of lone mothers than lone fathers is likely to have experienced two or more marriages.
3. With the universal trend toward smaller families, it is expected that the average number of children ever born to lone and married mothers will be similar, however, the number of total children is likely to be higher for lone mothers due to remarriage and blended families.
4. With respect to current educational attainment, it is anticipated that differences at the secondary level of schooling will be negligible, but fewer lone than married mothers are expected to have attained 'some' post-secondary education.
5. A greater proportion of lone than married mothers is expected to be currently employed; further, the duration of unemployed episodes is expected to be shorter for lone mothers, reflecting a greater economic need on the part of lone mothers.
6. The percentage of lone mothers currently employed in higher paying types of occupations (i.e., profession, managerial) is expected to be lower compared to the percentage of married mothers.

7. The level of income for lone mothers is expected to be lower compared to the level for both married mothers and lone fathers. The number of income earners is expected to influence the income differential.
8. It is expected that fewer lone mothers than either married mothers or lone fathers will own their home.

Cross-cultural Comparisons

It could be anticipated that the historical differences between Canada and the United States in such areas as divorce and remarriage would be reflected in the prevalence and characteristics of female lone-parent families in each country. With the cultural gap narrowing in recent years, as evidenced in the divorce rate differential, and in view of the demographic and cultural similarities between the two countries, it is expected that the comparisons of lone and married mothers in each country will reveal a pattern that is similar.

The analyses which follow in the next two chapters will shed light on these expected outcomes.

Notes

[1] Family History Survey documentation prepared by the Housing, Family and Social Division, Statistics Canada (Ottawa: 1984).

[2] Marital History and Fertility Survey (portion of the Current Population Survey) documentation prepared by the Department of Commerce, United States Bureau of the Census (Washington: 1985).

[3] Robinson, Barrie W. and Wayne W. McVey Jr., "The Relative Contributions of Death and Divorce to Marital Dissolution in Canada and the United States," Journal of Comparative Studies 16 (1985): 94-96.

[4] As the American survey focused on 'marital' history, it did not provide a category for the single (never married). The marital status variable from the adult file is therefore used to construct a female lone-parent variable including never married mothers. Differing totals produced simply reflect the focus of the analysis -- ever married mothers + or - never-married mothers.

[5] In the event of marital dissolution the custody of children is usually granted to the mother. As lone mothers are less likely than lone fathers to remarry, the female parent group is larger than the male parent group due to the fact that lone mothers are over represented in both the Canadian and American subsamples of female parents.

[6] A framework for examining the relationship between family and fertility was developed by Davis and Blake (1956) and further developed later by Bongaarts, J. in "A Framework for Analysing the Proximate Determinants of Fertility," Population and Development Review 4 (1978): 105-107. In this framework, variables conceptualized as "intermediate variables" come between macrosocial organizations and norms (i.e., social and cultural variables) and fertility levels. The intermediate variables are marriage and family characteristics that affect exposure to intercourse and have clear and direct ties to fertility. In this study it is the socio-economic variables that are conceptualized as the intermediate variables which come between the antecedent and current variables.

[7] Shryock, Henry S. and Jacob S. Siegel, The Methods and Materials of Demography (New York: Academic Press, 1976), 551.

[8] Shryock and Siegel, 550-551

[9] Agresti, Alan and Barbara Finlay, Statistical Methods for the Social Sciences 2nd edition (San Francisco: Dellen Publishing Company, 1986), 198.

[10] Kerlinger, Fred N., Foundations of Behavioral Research 2nd edition (New York: Holt, Rinehart and Winston, Inc., 1973), 160.

[11] Babbie, Earl R., The Practice of Social Research 2nd edition (Belmont, California: Wadsworth Publishing Company, Inc., 1979), 392.

[12] Aldrich, John H. and Forrest D. Nelson, Linear Probability, Logit, and Probit Models Series: Quantitative Applications in the Social Sciences (Beverly Hills: Sage Publications, Inc., 1984), 48.

[13] Agresti and Finlay, 482.

[14] Agresti and Finlay, 482.

[15] Agresti and Finlay, 483; Theil, Henri, "On the Estimation of Relationships Involving Qualitative Variables," The American Journal of Sociology 76 (1970): 107.

[16] Agresti and Finlay, 487.

[17] Norusis, Marija J., SPSS Advanced Statistics 6.1 (Chicago: SPSS Inc., 1994), 157.

[18] Norusis, 148.

[19] Norusis, 176; and Swafford, Michael, "Three Parametric Techniques for Contingency Table Analysis: A Nontechnical Commentary," American Sociological Review 45 (August, 1980): 672.

[20] Norusis, 154; and Agresti and Finlay, 490-491. The authors also note that the degrees of freedom for the chi-square statistics in a particular model equals the number of logits minus the number of independent parameters in the model. The number of logits is the number of combinations of levels of independent variables, since there is one logit for each combination.

[21] Norusis, 216; Magidson, Jay, "Qualitative Variance, Entropy, and Correlation Ratios for Nominal Dependent Variables," Social Science Research 10(1981): 178-183, 186-189.

[22] Norusis, 216; Magidson, 178-183; and Theil, 127-128, 133.

CHAPTER 5

CROSS-CLASSIFICATION ANALYSIS

The analysis in this chapter is based upon cross-classification tables which permit comparisons to be drawn between lone and married female parents in Canada and the United States. The comparisons employ two forms of cohort data -- retrospective and period (current) data.

The retrospective comparisons examine the relationship of the hypothesized antecedent variables to the evolution of female lone parenthood, as compared with the corresponding relationship to female married parents. The antecedent variables are early marriage and early childbearing in conjunction with the intermediate variables -- education and employment. These variables are derived from responses to survey questions which relate to past experiences at earlier points in time.

The period comparisons examine the current variables under study in relation to the characteristics female lone parents reported to possess at the time of the survey, as compared to those reported by female married parents. These variables include current marital status, fertility, number of children, education, employment, occupation, income, number of income earners, home ownership and distribution by province and race.

In addition to the comparisons of lone parents with married parents in each nation, comparisons of Canada with the United States are drawn in an attempt to elucidate cultural similarities and differences as well as overall trends.

The analysis focuses on the antecedent characteristics first, the current characteristics are then examined. The cross-classification tables are located in the appendix. Charts portraying a summary profile of the comparisons are interspersed throughout the text.

Antecedent Characteristics

The antecedent variables explore the theory that early marriage and early childbearing deter educational attainment, delay work force experience and, in combination, predispose female lone parenthood. Age is, therefore, a significant variable. Early marriage is concerned with marriage before ages 20 and 25. The early childbirth comparisons examine first birth before age 20 and before or during the first year of first marriage. The intermediate antecedent variables -- education and employment -- are assessed by attainment/experience in relation to age at first birth and first marriage.

Early Marriage

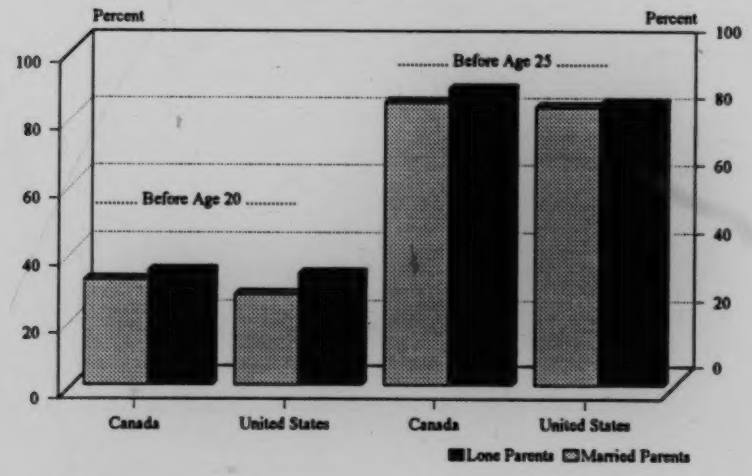
In both Canada and the United Stated States, close to one-third of female parents (lone and married) had married before age 20. Figure 5.1 portrays, however, that lone parents were more likely than those currently married to have done so. For Canada, 34.5% of lone parents compared to 31.7% of those currently married had married before age 20; the corresponding percentages for the United States are 33.7% and 27.6%.

Appendix Table 5 reveals that the higher percentage of early marriage among lone parents generally persists by current age group, although some differentials are notable. Early marriage is more prevalent among parents currently younger, particularly lone parents. For Canada, 75% of lone parents aged 20-24 were married before age 20 compared to 59.8% of those currently married, a difference of 15.2 percentage points; for the United States the corresponding percentages are 62.8% and 48.7%, a difference of

14.1 percentage points.

Another exception in the age-specific data for Canada appears in the 40-49 age group where the percentage of currently married parents who married before age 20 (31.2%) is greater than that for lone parents (22.9%). These parents were married in the later 1950s and early 1960s when the post-World War II economy remained favourable, marriage and fertility rates were high, and divorce rates had not yet started their upward swing.[1] The phenomenon of female lone parenthood had not yet evolved. American divorce rates were substantially higher than those in Canada which could account for the percentage of lone parents remaining higher in the 40-49 age group.[2]

Figure 5.1
Female Lone and Married Parents Married Before Ages 20 and 25
Canada, 1984, United States, 1985



Source: Appendix Table 5.

For the United States it is the 50-65 age group that is exceptional. The difference in early marriage between lone and married parents is reduced to a difference of 0.2 percentage points and, by age 65, the percentage for married parents (70.1%) exceeds that for lone parents (64.6%). This age group includes marriages of the latter depression years and World War II period (1939-1954). The older cohorts therefore experienced marriage during a period of economic depression with low fertility and divorce rates, and a low incidence of female lone parents. On the other hand, the younger cohorts of the age group achieved higher marriage and fertility rates, but as divorce rates remained lower, so did the incidence of female lone parenthood.[3]

Examining the cumulative percentages, which include those married before age 25 as well as age 20, the majority of both parent types are shown to have married by age 25, but higher age-specific rates generally prevail for lone parents. Considering ages 20-65 combined, over 80% of currently lone and married parents in Canada and the United States had married by age 25 and were consequently at risk of becoming lone parents through separation, divorce or widowhood (Chart 5.1, Appendix Table 5).

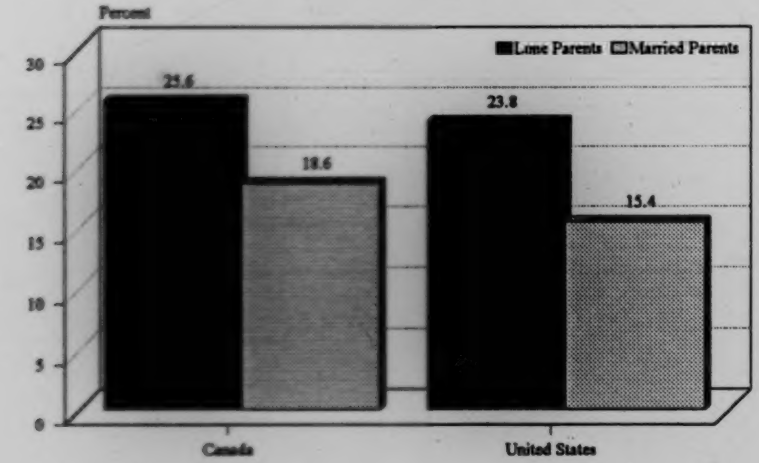
Early Childbearing

The pattern of early childbearing conforms with that of early marriage with the incidence of lone parents generally exceeding that of currently married parents. Examining ages 20-65 combined, 25.6% of Canadian lone parents compared to 18.6% of those married experienced a first birth before age 20; the corresponding percentages for the United States are slightly lower, 23.8% and 15.4%, respectively, although the differential is greater (Figure 5.2).

In the current age-specific groupings, marked differences again appear in the youngest group (20-24 years) where the difference in favour of lone parents is 28.5

percentage points for Canada and 13.5 for the United States. The atypical behaviour noted in the Canadian early marriage data for ages 40-49 (the percentage of married parents exceeds that of lone parents) is again present in the Canadian data for early childbearing but is not evident in the American data (Appendix Table 6). This could again reflect the fact that, while fertility rates were higher in both nations, higher divorce rates in the United States sustained the higher frequency of lone parenthood.

Figure 5.2
Female Lone and Married Parents Having a First Birth Before Age 20
Canada,1984, United States, 1985

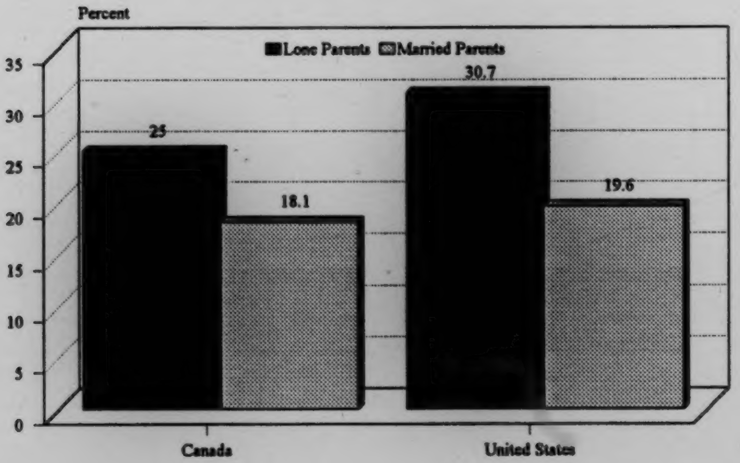


Source: Appendix Table 6.

In contrast, American lone parents aged 40-49 exceed those married by a notable percentage and also exceed Canadian lone parents in this age group with respect to having had their first birth before age 20.

Examining lone mothers who experienced a first birth before or during the first year of first marriage, the results are similar to the findings above -- the proportion of lone mothers in both countries exceeds that for married mothers in this respect. The finding holds for every age group, although the younger age groups stand out (Figure 5.3, Appendix Table 7).

Figure 5.3
Female Lone and Married Parents Having a First Birth
During or Before the First Year of First Marriage
Canada, 1984, United States, 1985



Source: Appendix Table 7.

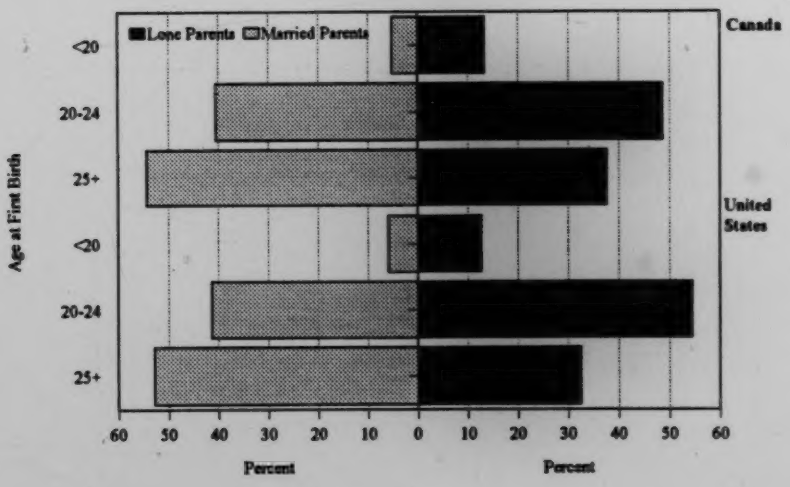
For both Canada and the United States, 46% of the lone parents aged 18-24 experienced a first birth before or during the first year of their first marriage. In the remaining age groups, the differential between lone and married parents is considerably higher for the United States than for Canada (with the exception of age group 25-29). Overall, considering ages 18-65, American lone parents are revealed to be more likely than their Canadian counterparts to have experienced early childbearing of this nature (30.7% compared to 25.0%, respectively).

One implication to be drawn from these findings is that a substantial proportion of pre-marital conception results in marriage. On the other hand, the higher incidence of pre- marital conception among lone parents indicates that a relatively high proportion of these marriages are subsequently dissolved.

Educational Attainment by Age at First Birth

Over three-quarters of the female population in Canada and the United States have either completed or attended high school[4]. It is, therefore, more likely that any differences in the educational attainment of lone and married female parents would appear at the post-secondary level of schooling.

Figure 5.4
Female Lone and Married Parents with Some Post-Secondary Education
by Age at First at Birth
Canada, 1984, United States, 1985



Source: Appendix Table 8.

The percentage distribution of both parent types by age at first birth, displayed in Figure 5.4, reveals primarily that a higher proportion of lone than married parents with some post-secondary education have experienced early childbearing -- by age 24 or under. It would appear, however, that a first birth by age 20 tends to thwart the educational attainment of married as well as lone parents (just 5-6% and about 13%, respectively for both nations, have attained some post-secondary education). With a first birth by age 20-24 the percentages with post-secondary increase to 48.8% for Canadian lone parents and 55% for their American counterparts; the corresponding percentages for married parents are about 41% for both nations. (Appendix Table 8.)

When the first birth is not early (at age 25 or over) the picture reverses -- the percentage of married parents with some post-secondary education exceeds that of lone parents. Over half of the married parents compared to about one-third of the lone parents (slightly more for Canada) are shown to have attained some post-secondary education. In sum, as the age at first birth increases, the proportion of married parents with some post-secondary education also increases while that for lone parents drops. This could indicate that early childbirth to lone parents creates a barrier to further education. The analysis of the current educational characteristics in the next section is expected to shed more light on this finding.

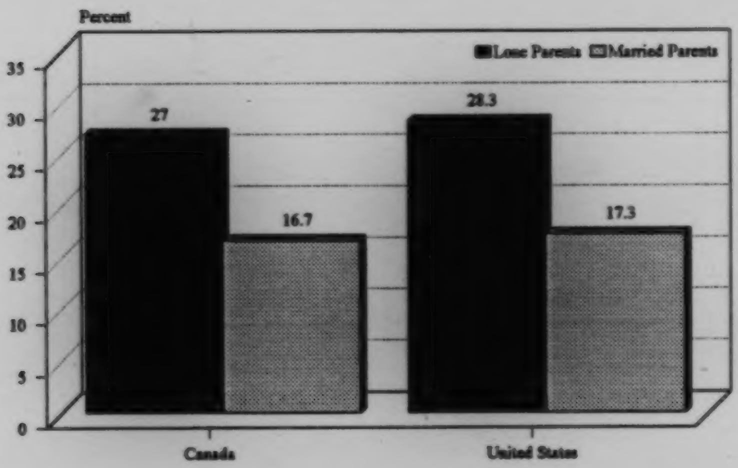
Employment Experience in Relation to First Birth

The hypothesized relationship between early childbearing, delayed work force experience and the propensity for female lone parenthood is more apparent than that revealed above for education. Figure 5.5 reveals that 27% of Canadian lone parents compared to 16.7% of those married starting working after their first birth; for the United

States the corresponding percentages are 28.3% and 17.3%.

The results by specific age group show an overall pattern that is similar for both Canada and the United States, although notable differences exist (Appendix Table 9).

Figure 5.5
Female Lone and Married Parents Who Started Working
After their First Birth, Canada, 1984, United States, 1985



Source: Appendix Table 9.

For Canada the greatest difference between lone and married parents is in the 30-34 and 40-49 age groups where the percentage point difference is 14.5 and 15.3, respectively, in favour of lone parents. For the United States the greatest difference occurs in the oldest age group. While a relatively small percentage of those aged 50-65 experienced an early first birth (as shown in Appendix Table 2), nearly half of those who did so did not start working until after this first birth. The divergence in this age group from the general pattern may to some extent reflect differences in the American survey question from which the data were derived.[5]

Educational Attainment by Age at First Marriage

The findings here are similar to those discussed above for education by age at first birth. Appendix Table 10 reveals primarily that a higher proportion of lone than married mothers with some post-secondary education have experienced early marriage (by age 20). As the results partly reflect the distribution of marriages, a greater proportion of Canadian lone (16.6%) than married mothers (10.8%) are shown to have attained some post-secondary schooling; the proportions are 23.7% and 15.5%, respectively, for their American counterparts.

When first marriage occurs at age 20-24, the proportion with post-secondary increases substantially for both parent types and for both countries, with the differential generally being in favour of lone mothers. On the other hand, when first marriage is not early (at age 25 or over) a higher proportion of married than lone mothers in both countries have attained some post-secondary.

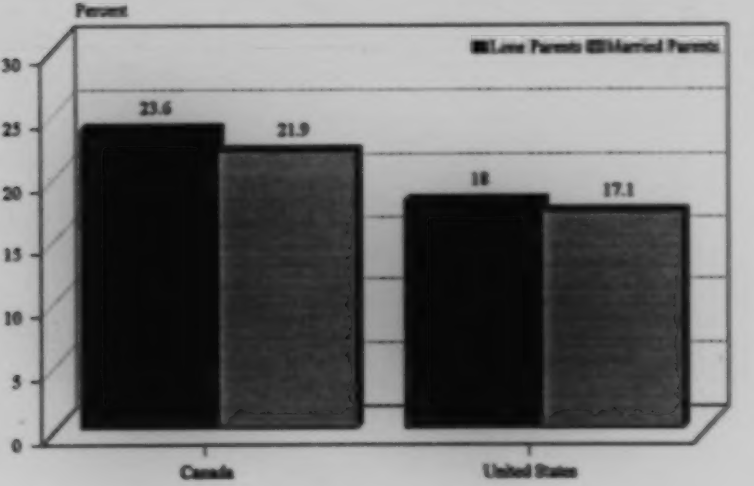
It is notable, however, that the differential in post-secondary attainment between lone and married mothers in both countries is, in general, considerably larger when examining the age at first birth antecedent than it is when examining the age at first marriage antecedent. This would indicate that early childbearing is the stronger determinant affecting the educational attainment of lone mothers.

Employment Experience in Relation to First Marriage

The pattern of first marriage and delayed work force experience is less evident than the first birth and delayed employment relationship discussed above. Appendix Table 11 reveals that Canadian lone mothers aged 30-39 were more likely than those married not to have started working until after their first marriage; American lone mothers aged 18-34 were more likely than those married not to have done so. While American lone mothers aged 35-49 show lower percentages compared to married mothers, lone mothers aged 50-65 in both countries were considerably more likely not to have worked before their first marriage

Overall, considering all age groups, Figue 5.6 reveals that the differential between Canadian lone and married mothers who had no work experience prior to their first marriage is two percentage points; for their American counterparts it is just one percentage point. Compared to the findings based on first birth and delayed work experience, early childbearing appears to be the stronger predictor of the two lone parent antecedent characteristics.

Figure 5.6
Female Lone and Married Parents Who Started Working
After their First Marriage, Canada, 1984, United States, 1985



Source: Appendix Table 11.

Current Characteristics

This section completes the theoretical assumption that the antecedent variables previously analysed predispose female lone parenthood, and that the resulting lone parent characteristics entail disadvantages for this group compared to married female parents. While the antecedent variables explore past experiences, the current variables represent the demographic, social and economic circumstances of lone and married female parents as reported at the time of the survey. The comparisons of the current characteristics examine the following variables: marital status, fertility, number of children, education, employment, occupation, income and dwelling tenure. Comparisons with male lone parents are also introduced where data are available and beneficial to the analysis.

Marital Status

In this portion, past marital experiences are examined for their relationship to current marital status, mainly to the female lone-parent status.

Number of marriages. Examining the number of marriages experienced reveals both similarities and differences between Canada and the United States. Starting with similarities, Figure 5.7 and 5.8 reveal that, in each nation, the percentages for male and female lone parents who have never married are a close match, with Canada's percentages (males 23%, females 20.3%) being lower than those for the United States (males 27%, females 27.8%).

The percentages for just one marriage are higher for all three Canadian parent types due to the higher incidence of multiple marriages in the United States. The two or more marriage category reveals a striking difference between Canadian and American lone fathers where the percentage point difference is 17.3 in favour of the United States.

Figure 5.7
Male and Female Lone Parents and Female Married Parents
by Number of Marriages, Canada, 1984

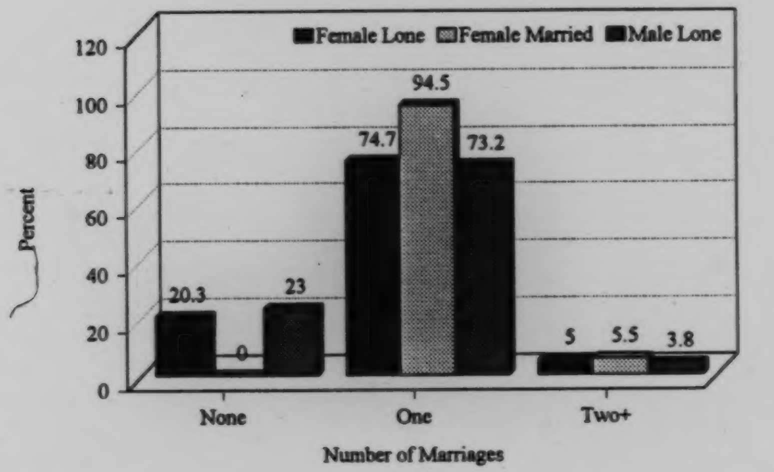
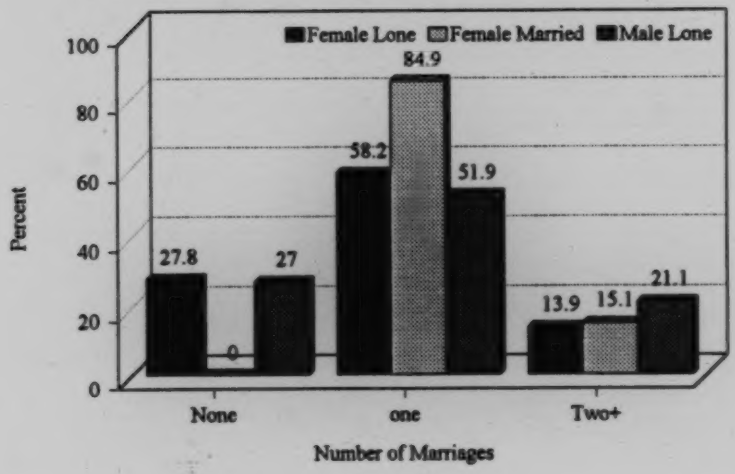


Figure 5.8
Male and Female Lone Parents and Female Married Parents
by Number of Marriages, United States, 1985



Sources: Appendix Tables 12 and 13.

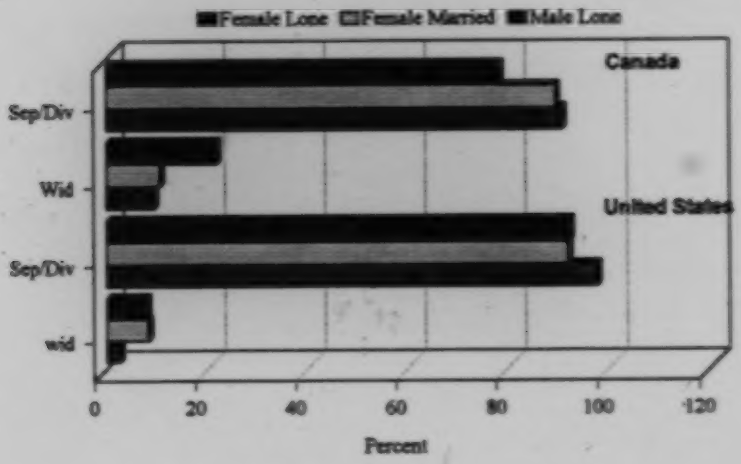
It is notable that, for both male and female lone parents in both countries, the highest proportion of those never married falls in the youngest age category and, as age increases, so does the percentage of one and two+ marriages (Appendix Tables 12 and 13). This finding elucidates the transitory nature of lone parenthood.

Dissolution of first and second marriages. The great majority of first marriages, for all parent types, is revealed to have dissolved through separation or divorce (Figure 5.9). This form of marital dissolution is higher in the younger age groups (18-29), although dissolution peaks at a later age (30-39) for Canadian married female parents. Separation and divorce drop abruptly at age 50-65 for Canadian female lone parents due to the higher proportion of widowed lone mothers in this sample. Separation/divorce does not decline for the other parent types in each country, particularly with respect to American male parents where it continues to be almost the sole cause of marital dissolution (Appendix Tables 14 and 15).

The termination of first marriage through widowhood consequently shows a reverse pattern accounting for 21.8% of the dissolutions for Canadian female lone parents age 18-65 but 10% or fewer of the remaining parent types; just 2.5% of the dissolutions affecting American male lone parents occurred through widowhood.

The dissolution of second marriages through separation/divorce remains high for both lone and married mothers in the United States. For Canada, however, separation and divorce decline in accordance with the lower incidence of second marriage. The proportion of second marriage dissolutions through widowhood consequently increases for Canada while it decreases for the United States. The male samples with respect to second marriage dissolution were too small to produce reliable results.

Figure 5.9
Male and Female Lone Parents and Female Married Parents
by Dissolution of First Marriage, Canada, 1984, United States, 1985

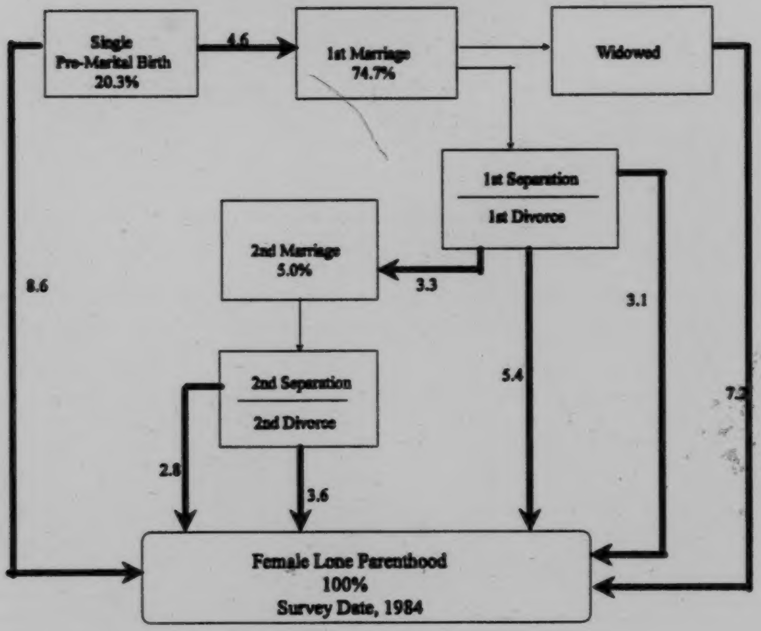


Sources: Appendix Tables 14 and 15.

In general, the dissolution of marriage through separation/divorce is higher for all lone parents, male and female, in the youngest age group (18-29) compared to the results for all married parents. Widowhood as a cause of marital dissolution is highest for Canadian female lone parents and lowest for American male lone parents. This conforms with the findings in Appendix Tables 10 and 11 where remarriage is lower for Canadian female parents (5.0%) and highest for American male lone parents (21.1%). (The very low percentage of Canadian male lone parents experiencing two+ marriages (3.8%, Appendix Table 13) may be affected by the small sample size.)

Duration of female lone parenthood. After examining the number of marriages experienced and how they terminated, this portion investigates the average duration of lone parenthood -- that is, the average number of years that female parents remained in the single, separated, divorced and widowed statuses.

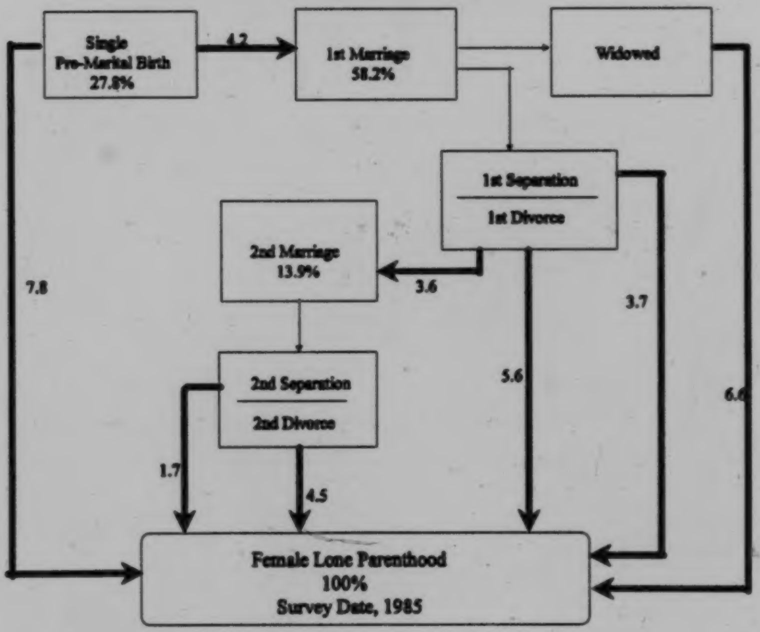
Figure 5.10
Average Number of Years Experienced
in the Single, Separated, Divorced and Widowed Statuses
Canada, 1984


Single
Pre-Marital Birth
20.3%
4.6
1st Marriage
74.7%
Widowed
1st Separation
1st Divorce
2nd Marriage
5.0%
3.3
8.6
3.1
5.4
7.2
2nd Separation
2nd Divorce
2.8
3.6
Female Lone Parenthood
100%
Survey Date, 1984

Sources: Appendix Tables 12 and 16.

The results for Canada and the United States are quite similar, as shown in Figures 5.10 and 5.11. Single mothers who experienced pre-marital child birth spent in excess of four years, on average, as lone parents (Canada 4.6 years, United States 4.2 years). Canadian single mothers who did not marry by the survey date endured 8.6 years on average compared to 7.8 years for their American counterparts. The duration was longest for mothers who were widowed from the time of their first marriage to the survey date -- 7.2 and 6.6 years on average for Canada and the United States, respectively. Separated mothers experienced shorter episodes. Combining the periods of separation following the first and second marriages, the total duration on average was 3.0 years for Canada and 2.7 years for the United States. Combining the three episodes of divorce (from termination of the first to the second marriage, following the first marriage to the survey date, following the second marriage to the survey date), the total duration of lone parenthood, on average, was 4.1 years for Canadian mothers compared to 4.6 years for American mothers (Appendix Table 16).

Figure 5.11
Average Number of Years Experienced
in the Single, Separated, Divorced and Widowed Statuses
United States, 1985


Single
Pre-Marital Birth
27.8%
4.2
1st Marriage
58.2%
Widowed
1st Separation
1st Divorce
2nd Marriage
13.9%
3.6
7.8
3.7
2nd Separation
2nd Divorce
5.6
6.6
1.7
4.5
Female Lone Parenthood
100%
Survey Date, 1985

Sources: Appendix Tables 12 and 16.

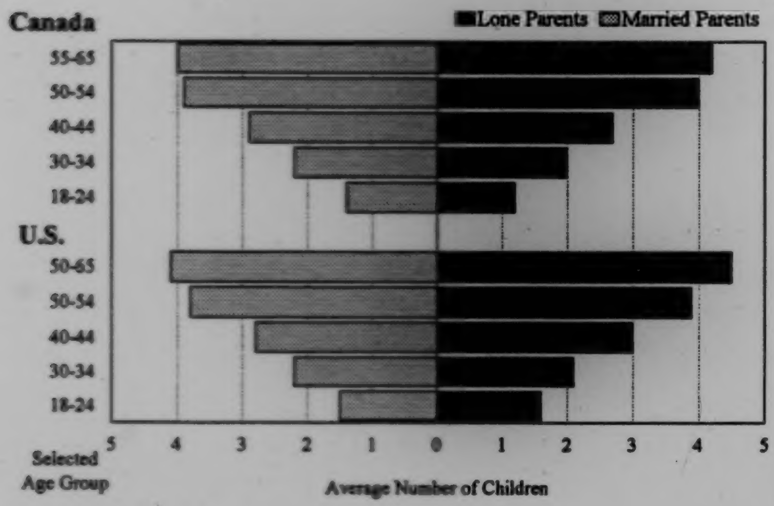
The total number of lone parent years, on average, is 5.2 years for Canadian mothers and 5.0 years for American mothers. As lone parenting varies by source and duration, the overall average encompasses a very broad spectrum of individual experiences. It does, however, reveal the transitional aspect of female lone parenting which was noted above under number of marriages. In conjunction with the data previously noted on marital dissolution, the transitions are very likely to occur in the younger age groups and at a critical stage in the family-life cycle.

Fertility

The fertility of lone and married mothers differs very little overall. All mothers had about two natural children on average. For ages 18-65, Canadian lone mothers had slightly fewer children (2.4) than those married (2.6); the reverse is true for American lone mothers who had slightly more children (2.7) than those married (2.5) (Figure 5.12, Appendix Table 17).

The above finding generally holds by age group to age 49 -- Canadian lone mothers had slightly fewer children than those married while American lone mothers, with the exception of ages 30-39, had slightly more than those married. By age 50-65, however, cumulative fertility is higher for lone parents in both nations. In other words, when considering the older age groups and completed families, lone parents are more likely than those currently married to have larger families. Should the larger number of children in older female lone-parent families be a consequence of early childbearing, which in turn may be a contributing factor to marital dissolution, then this finding likely reflects the influence of the earlier determinants in predisposing current lone parenthood.

Figure 5.12
Female Lone and Married Parents
by the Average Number of Children Ever Born
Canada, 1984, United States, 1985



Source: Appendix Table 17.

Total Number of Children

The total number of children includes adopted and step children in addition to natural children. When families dissolve through divorce, the custody of children in the majority of cases is granted to the mother.[6] This may shift the social and economic responsibility of raising all of the children in the family to the lone female parent. This comparison examines the extent to which all of the children (adopted, step and natural) were being raised by lone mothers, as apposed to lone fathers, following family dissolution.

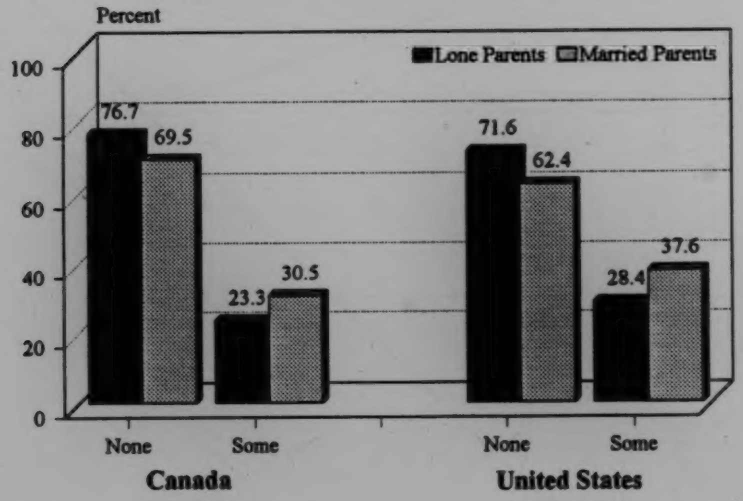
Appendix Table 18 reveals that both Canadian and American lone mothers were responsible for more children than were lone fathers, on average. For Canada, the difference is very slight with lone mothers aged 18-65 having 2.5 children compared to lone fathers having 2.4. Age group 50-65 shows a substantial difference, however, where the completed families of Canadian lone mothers are considerably larger than those for lone fathers (e.g., 4.7 compared to 3.5 children in favour of lone mothers). For the United States the difference is greater -- lone mothers aged 18-65 are shown to have 2.2 children compared to 1.6 for lone fathers, on average. The increase in family size for older American lone mothers is not apparent due to a difference in the question asked and the data collected in the United States survey.[7]

Education

The majority of all female parents in both nations completed at least some secondary education and a higher proportion of married parents than lone parents did so. For the total population of female parents in Canada, 81.6% of lone parents compared to 84.3% of those married achieved some secondary schooling. For the American population of female parents who reached the secondary level of education only, 71.6% of lone parents compared to 62.4% of married parents achieved some secondary schooling only. (The United States survey collected the data differently.)[8] (Appendix Table 19.)

The assumption that early childbearing thwarts post-secondary educational attainment, which was investigated under the antecedent characteristics, is substantiated in this comparison. Figure 5.13 reveals that a higher proportion of married mothers than lone mothers in both nations attended or completed education at the post-secondary level, and the proportion is greater for American married mothers (37.6%) than for their Canadian counterparts (30.5%). The corresponding percentage for American lone parents (28.4%) also surpasses that for Canada (23.3%) (Appendix Table 20).

Figure 5.13
Female Lone and Married Parents with Post-Secondary Education
Canada, 1984, United States, 1985



Source: Appendix Table 20.

Examining the results by age group, the bulk of all female parents with some post-secondary education falls in the 30-49 age group. While the proportion of lone mothers is smaller than that shown for those married, this finding reveals that a substantial proportion of lone mothers in both nations did return to school at this stage of the family life-cycle to obtain post-secondary education (Appendix Table 20)

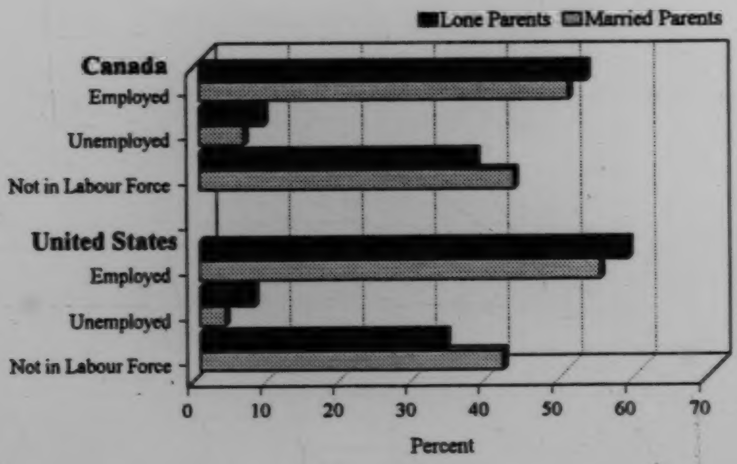
Employment Status

Figure 5.14 outlines current employment status in a pattern that is similar for both Canadian and American female parents. In general, more lone than married parents were currently in the labour force either employed or unemployed seeking work, although the percentage of American lone parents employed (58.7%) is higher than that for Canada (53.1%).

Figure 5.14

Female Lone and Married Parents by Current Labour Force Status

Canada, 1984, United States, 1985



Sources: Appendix Tables 21 and 22.

By age group, Appendix Tables 21 and 22 indicate that the percentage employed for all female parents rises to ages 40-49 then drops (with the exception of American lone parents aged 50-65 where participation remains relatively high at 62.2%). Although participation peaks at ages 40-49 for all female parents, the rate is higher for lone than married mothers at this age for both Canada and the United States. These results primarily imply a greater need to work on the part of female parents.

Reasons for unemployment. While the reduced sample size places limitations on these comparisons, some salient points can nevertheless be drawn from Appendix Tables 23 and 24. About half of Canadian lone and married mothers ranked lack or loss of work as the primary reason for unemployment; just over one-quarter ranked personal or family commitments as the secondary reason. The picture is virtually reversed for American lone and married mothers with the majority ranking personal/family reasons first and lack/loss of work second, although fewer lone than married mothers ranked the former reasons as the most important. In either case, personal/family reasons are more prevalent in the younger age groups while work-related reasons increase with age for both nations.

Due to amounts too small to be expressed, little can be concluded regarding the 'health' and 'other' categories beyond the fact that about 20% of Canadian lone and married mothers and just over 25% of their American counterparts reported these factors as reasons for unemployment. For American married mothers, health concerns were less significant than 'schooling/retirement/other' as reasons for not working. These areas, particularly health, have implications worthy of further research with respect to lone mothers.

Duration of Unemployment. Considering ages 18-65, lone parents experienced unemployment for fewer years, on average, than did married parents (Appendix Tables 25 and 26). For Canada, lone mothers were unemployed for 4.9 years on average compared to 5.7 years for those married; the corresponding averages for American lone and married mothers are 4.2 and 4.8 years, respectively. This could again indicate a greater need to work on the part of lone mothers as shown previously in Appendix Tables 21 and 22 (more lone than married mothers are shown to be currently in the labour force).

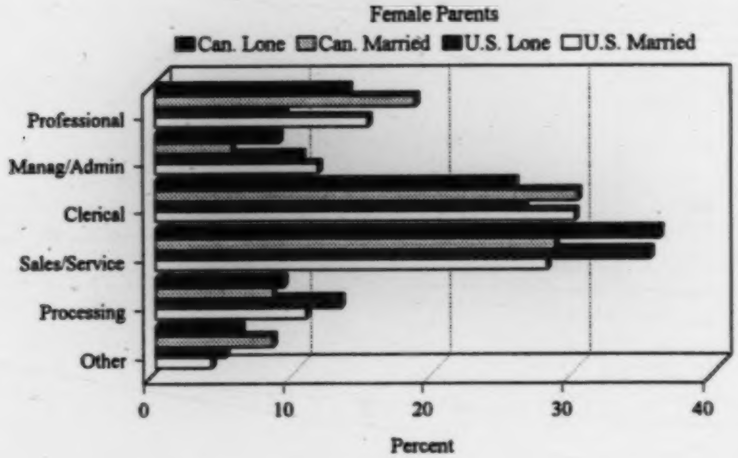
The percentage distributions reveal that the duration of unemployment generally varies by age -- the shorter the duration the younger the parent age group. The greatest proportion of all mothers aged 18-29 endured unemployment from <1 year to 2-5 years while the greatest proportion aged 50-65 years were unemployed for 6+ years.

Duration of unemployment by the average number of years and age, however, reveals some subtle differences. Canadian lone mothers aged 18-24 experienced 2.1 years unemployed on average compared to 1.8 years for married mothers; the corresponding averages for their American counterparts are 3.0 and 2.7 years, respectively. The longer duration unemployed in the youngest age group for lone mothers could reflect the effects of early childbearing and delayed work force participation.

Occupation

The most apparent finding revealed in Figure 5.15 is the percentage of female parents clustered in the clerical, sales and service occupations -- nearly 60% of lone and married mothers in both Canada and the United States. Lone mothers in both nations exceed those married in sales and service while the reverse is shown for clerical occupations (Appendix Tables 27 and 28).

Figure 5.15
Female Lone and Married Parents by Occupation
Canada, 1984, United States, 1985



Sources: Appendix Tables 27 and 28.

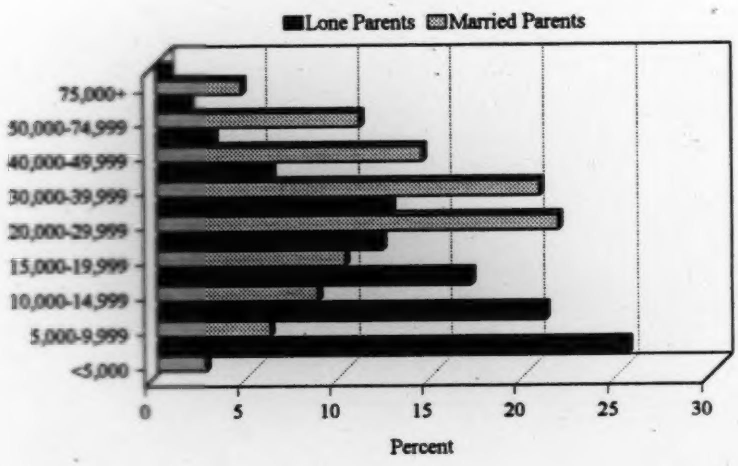
Female parents are less apparent in the professional occupations. The percentage of married mothers is higher in this category, but Canadian lone mothers (13.9%) surpass American lone mothers (9.3%). A notable finding by age group is the increase in the percentage of Canadian lone mothers who attained professional employment in later life -- by ages 50-65 (20.5%). The management/administrative positions are also sparsely occupied by female parents -- American married mothers show the highest percentage (11.7%) followed by American lone mothers (10.5%), Canadian lone mothers (8.9%) and Canadian married mothers (5.5%). The representation of female parents in the processing occupations is higher; American female parents in this category again exceed their Canadian counterparts.

In general, while some inroads have been made into the professional field, the overall pattern is similar for lone and married mothers in both Canada and the United States with the majority being employed in the traditionally 'female' occupations.

Family Income

The distribution of family income, portrayed in Figure 5.16, reveals a striking contrast between the incomes of American lone and married female parents. The greatest differentials occur at each end of the income scale. For incomes of less than $10,000, the percentage of lone mothers is high (46.4%) while that for married mothers is low (8.7%). For incomes of $30,000 and over, the percentage of married mothers is high (50.7%) while that for lone mothers is low (11.7%). The remaining bulk of both lone and married mothers (41%) falls in the $10,000-$29,999 category, although the highest proportion of married mothers is at the top of this income range (21.7%) while the highest proportion of lone mothers is at the bottom (17%). (Appendix Table 29.)

Figure 5.16
Female Lone and Married Parents by Family Income
United States, 1985



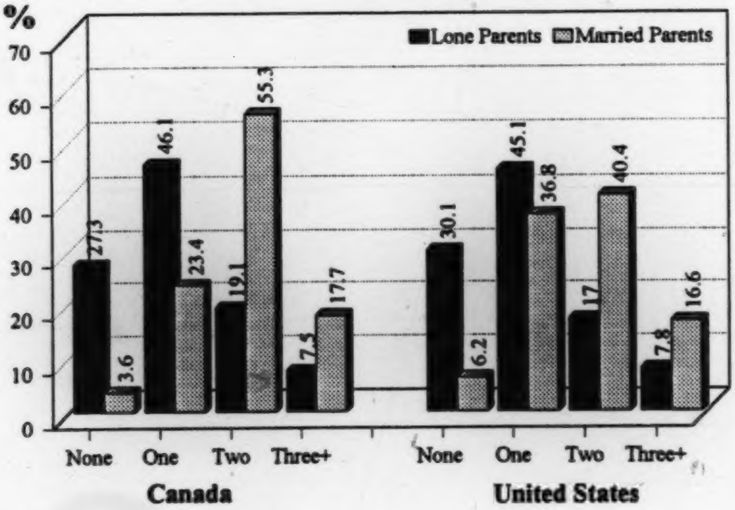
Source: Appendix Table 29.

The Canadian survey did not collect income data, however, the 1985 family income data published by Burch and McQuillan[9] permit the following comparisons to be made. For both nations, the average income of lone mothers falls in the $10,000-$14,999 category. The average for American married mothers falls in the $20,000-$29,999 income group while that for Canada is higher -- $30,000-$39,999. The lowest average income for lone mothers appears in the youngest age group (18-24 years) where it is revealed to be $<10,000 for both nations[10]. Nevertheless, income generally increases with age, particularly for lone mothers. This may be attributed to delayed careers achieved or to increased child maintenance or social security payments which would serve to augment the income of lone mothers in advancing age groups.

Number of Income Earners

Female lone parent families are likely to have just one income earner -- Figure 5.17 indicates that the lone mother is the sole provider in over 40% of the cases for both Canada and the United States. It is also remarkable that in about three-quarters of the cases there is either just one or no income earner. On the other hand, the majority of female parents currently married are more likely to be a partner in either a dual-earner or three+-earner family; the percentage is higher for Canada (73%) than for the United States (57%).

Figure 5.17
Female Lone and Married Parents by the Number of Income Earners
Canada, 1984, United States, 1985



Source: Appendix Table 30.

The number of earners per family is revealed to be a significant factor contributing to the income gap between lone and married female parents. It is more apparent in the younger age groups where Appendix Table 31 indicates that, for both Canada and the United States, on average, female one-parent families do not totally emerge as one-earner families until age 35 (this could reflect the effect of delayed employment which was previously discussed under the antecedent variables). Income and the number of earners are essential variables in identifying and defining the incidence of poverty among lone mothers.

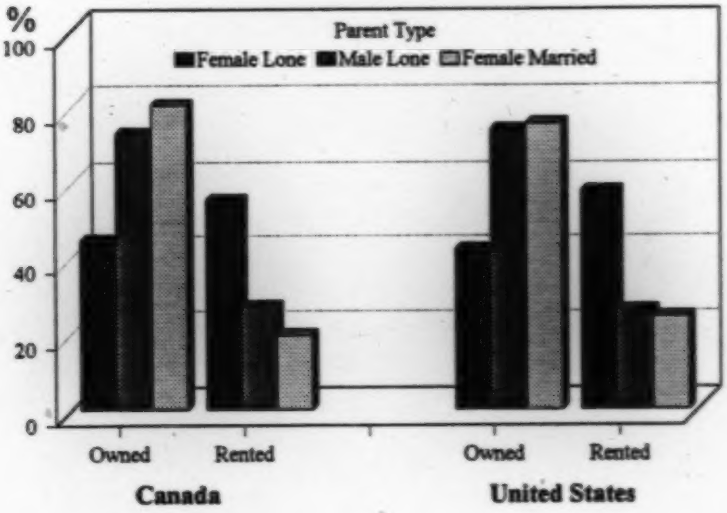
Home Ownership

Closely linked with income and the number of earners is the economic problem of home ownership. Figure 5.18 indicates that the problem is greater for lone mothers than it is for lone fathers or married mothers. For Canada, 44.5% of lone mothers compared to 73.1% of lone fathers own their home, but the percentage is highest for married mothers (80.6%). About the same percentage of American lone mothers own their home (42.1%), however, the percentage spread between American lone fathers (74.1%) and married mothers (75.8%) is considerably less than that for Canada.

Home ownership is mainly problematic in the younger age groups for all parent types in both countries. The proportion of lone and married mothers who own their home increases with age and is highest in the 50-65 age group, although considerably higher for married mothers. The percentage of lone father home owners is also highest in the oldest age group, higher for Canada than the United States, and in both cases lower than the percentage for married mothers. (Appendix Tables 32 and 33.)

These results reflect the economic disadvantages confronting female lone parents -- the lower incomes of sole-earner families competing with the higher incomes dual-earner families. Male lone parents fall in between the two extremes. It can be speculated that lone fathers are more likely to maintain their employment throughout their lone-parent years and generate higher incomes than lone mothers but lower than two-earner families.

Figure 5.18
Male and Female Lone and Female Married Parents by Home Ownership
Canada, 1984, United States, 1985



Source: Appendix Tables 32 and 33.

Another important concern recently investigated is the relationship between housing and health. Popay and Jones[11] studied poverty and material disadvantage as major factors in the patterns of health and illness of lone mothers. They found that, of lone mothers living in rented accommodation (with children in fair to poor health), 28% had suffered recent illness compared to just 16% of home-owning mothers. Further, the housing tenure and health relationship did not appear to affect the health status of lone fathers and their children. These findings open new avenues for research.

Distribution by Province and Race

The distribution of Canadian female lone-parent families by province reveals, as would be expected, that the highest proportion resides in the two provinces with the largest populations -- Ontario (35.3%) and Quebec (25.5%), while the smallest province, Prince Edward Island, comprises the smallest proportion (0.5%). Examining lone-mother families in each province as a percentage of all families with children reveals that New Brunswick had the highest proportion(17.7%).

Table 5.1
Female Lone-Parent Families by Province
Canada, 1984 and 1991

	No. 000	% distribution	% of all families with children	
			1984	1991
Newfoundland	10	1.9	10.0	12.9
P.E.I.	3	0.5	12.6	15.4
Nova Scotia	17	3.2	11.8	17.1
New Brunswick	21	4.0	17.7	16.3
Quebec	134	25.5	12.5	17.7
Ontario	186	35.3	11.7	16.0
Manitoba	21	4.0	12.2	16.8
Saskatchewan	17	3.1	10.7	15.3
Alberta	51	9.7	12.4	15.6
British Columbia	67	12.7	15.0	16.7
Canada	527	100.0	12.8	16.4

Sources: Statistics Canada, Family History Survey, (Ottawa: Housing, Family and Social Division),1984; Statistics Canada, *Lone-Parent Families in Canada* (Ottawa: Minister of Industry, Science and Technology, 1992), 18.

The percentage of all families with children that were headed by a woman grew in Canada from 12.8% in 1984 to 16.4% in 1991, and the proportional distribution shifted with the province of Quebec then showing the highest proportion at 17.7%[12]. Quebec had the third highest divorce rate and lowest marriage rate among the provinces in 1991, which would contribute to the higher proportion of female lone-parent families in this province.

The distribution of American female parents by race reveals that 64.3% of lone mothers were Anglo-American while 34.5% were African-American; for married mothers the corresponding percentages are 89.3% and 7.6%. Examining the distribution by marital status indicates the vast majority of Anglo-Americans (70%) were separated or divorced while 41% of African-Americans fell in this category. On the other hand, just 16.8% of Anglo-Americans were single (never-married) while half (50.1%) of the African-American lone mothers appear in the never-married status. Considering all families with children, among Anglo-American families 10% were lone-mother families while, among African-Americans families, 40% were lone-mother families. By 1990, McLanahan and Garfinkel state that, "among Whites, mother-only families accounted for 17% of all families with children, and among African-Americans they accounted for 53% of all families".[13]

Table 5.2
Female Lone-Parent Families by Race
United States, 1985

	Anglo-American	African-American	Other	Total No.	Total %
		%		000	
Lone Parent	64.3	34.5	1.7	7,511	24.2
Married Parent	89.3	7.6	3.2	23,426	75.7
Total	25,754	4,373	810	30,937	100.0

Source: United States Bureau of the Census, Current Population Survey: Marital History and Fertility Supplement (Washington: Department of Commerce), 1986.

Summary and Conclusions

Antecedent Characteristics

The retrospective crosstabulations indicate that a relationship indeed exists between the antecedent variables and female parenthood. Marriage and, in particular, childbearing at an early age appear to be primary indicators. The affect of early marriage on the intermediate variables -- education and employment -- is observable but not strong compared to early childbearing. The extent to which early childbearing influences the intervening variables is most apparent through employment. Lone parents were more likely than those married to delay entry into the labour force until after their first birth. The relationship with education is less clear in this portion of the analysis. This can be attributed to the proportion of lone mothers who experienced early childbearing then returned to school at a later age to further their education. This does, however, support the assumption that childbearing at an early age blocks educational attainment at an early age.

Current Characteristics

The crosstabulations of the current characteristics develop a fairly clear picture of the effects of the antecedent determinants. Female lone parenthood is most likely to result from separation or divorce in the younger age groups. Lone parenthood, however, is a transitory stage. While the duration may vary from three to seven years, on average, transitions are very likely to occur at a critical stage in the family-life cycle -- when young mothers are raising their dependent children.

Lone mothers in the older age groups are revealed to have had or to have raised more children (natural, step, adopted) than either married mothers or lone fathers. This could be due to starting a family earlier (early childbearing), and/or child custody being granted to the mother, which in the first case could be a cause of marital dissolution and in the second case a consequence.

Lone mothers received less education than married mothers. While an ambitious proportion continued their education at a later age, fewer lone than married mothers attained post-secondary education. On the other hand, while labour force entry was delayed for lone mothers (due to early childbearing), more lone than married mothers were currently employed and fewer had never worked. This would indicate a greater need to work on the part of lone parents. Their is little difference shown in the types of occupations held by either parent type, although lone mothers had made inroads into the professional field.

A strong association is revealed between the current economic variables and female lone parenthood. Family income, the number of family earners and dwelling tenure summarize the economic disadvantages confronting lone mothers compared to married mothers -- income is lower, fewer own their home, and the lone mother is the sole-family provider compared to two-earner families.

Comparisons of Canada and The United States

The overall pattern of lone parent characteristics revealed in the comparisons is remarkably similar for Canada and the United States. Considering the antecedent characteristics for both nations, about one-third of the lone mothers married early, about one-quarter experienced early childbearing, slightly more American than Canadian lone mothers who had experienced early childbearing had also attained some post-secondary schooling, and 28% of lone mothers in both countries delayed working due to early childbearing.

The comparisons of the current characteristics elucidate a few differences between the two countries. Compared to Canada, American lone mothers and, especially, lone fathers experienced a higher incidence of divorce and serial marriage, thus emphasizing the transitory nature of lone parenthood. While the average duration of lone parenthood, in total, is revealed to be similar for both countries, the episodes for American lone mothers never married, separated and widowed are slightly shorter than those for Canada. The shorter duration of never married motherhood indicates the greater role of subsequent marriage and divorce in producing current lone motherhood, and the shorter duration of separation and widowhood indicates the greater contribution of remarriagre and divorce to current lone motherhood in the United States compared to Canada.

A higher percentage of American lone mothers attained some post-secondary education and a higher percentage were currently employed compared to the Canadian findings. Further, the primary reason for current unemployment is reversed -- one-half of the Canadian lone mothers ranked 'lack or loss of work' as the primary reason while one-half of their American counterparts ranked 'personal or family reasons' in first place. The economic comparisons are essentially congruous revealing disadvantages for lone mothers that persist in both countries.

The relationships revealed in this analysis will be examined further in the next chapter using a logit model.

Notes

[1] Statistics Canada, Divorces, 1991, Catalogue 84-213 (Ottawa: Minister of Industry, Science and Technology, 1994), 5; Statistics Canada, Marriages, 1991, Catalogue 84-212 (Ottawa: Minister of Industry, Science and Technology, 1993), 13; Statistics Canada, Births, 1991, Catalogue 84-210 (Ottawa: Minister of Industry, Science and Technology, 1993), 25; and Romaniuc, A., Fertility in Canada: From Baby-boom to Baby-bust, Current Demographic Analysis, Statistics Canada, Catalogue 91-524E (Ottawa: Minister of Supply and Services, 1984), 121.

[2] The Universal Almanac 1994, ed. John W. Wright (Kansas City: Andrews and McMeel, A Universal Press Syndicate Co., 1993), 293.

[3] The Universal Almanac 1994, 292-193.

[4] Statistics Canada, Educational Attainment and School Attendance, Catalogue 93-328 (Minister of Industry, Science and Technology, 1993), 11; The Universal Almanac 1994, 235.

[5] The Canadian survey collected data on the year respondents first started working. As this question was not asked in the American survey, data collected on 'not in the labour force' at the time of first birth were substituted. The older age group could, therefore, include American lone parents who in their lifetime never entered the labour force. On the other hand, the results for older married parents remain consistent with the general pattern.

[6] Baker, M., Families: Changing Trends in Canada, 2nd Edition (Toronto: McGraw-Hill Ryerson Limited, 1990), 106; Haskey, John, "Lone Parenthood and Demographic Change," in M. Hardey and G. Crow, eds. Lone Parenthood: Coping with Constraints and Making Opportunities in Single-Parent Families (Toronto: University of Toronto Press, 1991), 32-34.

[7] For Canada, total children (natural, adopted, step) refers to all children raised; for the United States it refers to total children still at home.

[8] The Canadian survey collected elementary/secondary and post-secondary data in two separate questions asked of the total population; the United States survey collected highest level of education from the total population in one question. The results in Appendix Table 17 are, therefore, not directly comparable.

[9] Burch, T. and K. McQuillan, "Part II: Family Change and Family Income in Canada," in One-Adult and Two-Earner Households and Families: Trends, Determinants and Consequences (Ontario: Population Studies Centre, University of Western Ontario, 1988), Table 3.2.

[10] Burch and McQuillan, Table 3.4.

[11] Popay, Jennie and Gill Jones, "Patterns of Health and Illness amongst Lone-Parent Families," in M. Hardey and G. Crow, eds. Lone Parenthood: Coping with Constraints and Making Opportunities in Single-Parent Families, 75-86.

[12] Lindsay, Colin, Lone-Parent Families in Canada, Statistics Canada, Catalogue 89-522E (Ottawa: Minister of Industry, Science and Technology, 1992), 18.

[13] McLanahan, Sara and Irwin Garfinkel, "Single Motherhood in the United States: Growth, Problems, and Policies," in Joe Hudson and Burt Galaway eds. Single Parent Families: Perspectives on Research and Policy (Toronto: Thompson Educational Publishing, Inc.,1993), 16.

CHAPTER 6

LOGLINEAR ANALYSIS

This chapter attempts to clarify and summarize some of the relationships that were examined in the previous chapter. The logit model enables the responses to categorical independent variables to be scored on a dichotomous dependent variable. In this case, the dichotomous dependent variable is female parent -- coded 1 for female lone parent and coded 2 for female married parent. The responses to the categorical independent variables under study are, therefore, scored 1 or 2 on the dependent variable. The sum of the scores in the sample is the number of code 1 responses. The mean of the code 1 and code 2 scores (the sum divided by the sample size) is the proportion of code 1 responses.[1] The logit therefore models how the proportion of code 1 (female lone parent) scores on the dichotomous dependent variable depends on particular independent variables. The code 2 (female married parent) scores then become aliased parameters and are set to zero, thus serving as the frame of reference upon which comparisons can be based.

For the purpose of interpretation, the logit is expressed as the log of the odds. Odds are the ratio of the probability that a characteristic will be present to the probability that the characteristic will not be present. First, the odds of female lone parents possessing a particular characteristic are computed and, similarly, the odds of female married parents possessing the characteristic are computed. The ratio of these two odds -- lone mothers to married mothers possessing a particular characteristic -- is then computed. The natural logarithm of this ratio is finally computed and it is the resulting log-odd ratios that appear in the tables presented below. Since it is easier to interpret in odds than log odds, the table estimates may be converted to odds by applying the exponential (antilog) function to the log odds.[2]

This analysis follows the same format that was used in the previous chapter. For both Canada and the United States, the antecedent characteristics are examined in the first section followed by the current characteristics in the second. There are, however, some limitations. The crosstabulation of variables which generated small cells or missing data (e.g., unemployment by reason or duration and male lone parent tabulations) and the crosstabulations which substituted published data for unavailable data (e.g., the number of income earners not collected in the Canadian sample) are notable omissions.

In the first section, the antecedent independent variables -- early marriage and early childbearing -- are first examined by current age alone, then with the intermediate variables -- post-secondary education and first work experience -- as interaction terms.

In the second section, the independent variables relating to the current characteristics are examined in three groupings which comprise the demographic, social and economic variables. The demographic group includes the number of marriages, number of children, and first marriage dissolution. The social aspect includes post-secondary education, labour force status and occupation. For the United States, the economic independent variables include family income, the number of income earners, and home ownership for both males and females. Income and number of earners data were not collected in the Canadian survey. Post-secondary educational attainment (substituted for income) and home ownership are therefore examined for both males and females.

Age is a significant variable in determining lone parenthood. This analysis is performed using the current age groups most suitable to the data, conforming whenever possible with the cross-classification tables developed in the previous chapter.

The logit analysis tables, interspersed throughout this chapter, provide the significance level for the goodness-of-fit statistics -- the likelihood ratio chi square and Pearson chi square. The measures of association -- entropy and concentration -- are also included. These techniques are discussed in the methodology portion of Chapter 4.

Antecedent Characteristics

The antecedent independent variables are early marriage and early childbirth, defined in both cases as before age 20. The main effects of the antecedent events are first examined by current age group alone, then combined with the interaction effects of the intermediate variables -- post-secondary education (coded 1 for some post-secondary) and first work experience (coded 1 for prior to first marriage/childbirth). The early marriage data appear in Table 6.1 for Canada and Table 6.2 for the United States; the early childbirth results follow in Tables 6.3 and 6.4 for Canada and the United States, respectively.

Early Marriage

Table 6.1, for Canada, contains the log odd ratios of lone mothers to married mothers regarding early marriage. Considering all ages, 20-65 years, lone mothers are revealed to be more likely than those currently married to have married before age 20, the log odds ratio is .1869. Converting the log odds to odds, this value corresponds to an odds of ($e^{.19}$), or 1.21 to one. In more simplistic terms, it is estimated that lone mothers are nearly one and a quarter times more likely than those currently married to have

Table 6.1
Log Odds of Lone to Married Female Parents by Early Marriage, Post-Secondary Education, First Work Experience and Current Age Group, Canada, 1984

	Independent Variable		
Current Age Group	Early Marriage (before Age 20=1)	Early Marriage by Post-Secondary Ed. (some post-sec.=1)	Early Marriage by First Work Experience (after 1st Marriage =1)
All Ages	0.1869	-0.2445	0.4330
20-24	0.2513	-0.7079	0.2586
25-29	0.4521	-0.8207	0.0282
30-34	0.3413	-0.7002	0.0004
35-39	0.1427	-0.5133	0.1695
40-49	-0.0598	-0.4568	0.2868
50-65	0.0	0.0	0.0
Constant	-1.9928	-1.9108	-2.1309
Sig.L.R.*	.05	.67	.33
P.*	.04	.71	.33
Entropy	.006	.018	.010
Concentration	.004	.006	.006
Number of Cases	3,853	3,853	3,386

* See footnote on Table 6.10.

Note: Parameter estimates for the last category of the age groups are set to zero and thus serve as the frame of reference for the other parameter estimates. This condition applies in all logit model tables (Tables 6.1-6.10).

Table 6.2
Log Odds of Lone to Married Female Parents by Early Marriage, Post-Secondary Education, First Work Experience and Current Age Group, United States, 1985

	Independent Variable		
Current Age Group	Early Marriage (before Age 20=1)	Early Marriage by Post-Secondary Ed. (some post-sec.=1)	Early Marriage by First Work Experience (after 1st Marriage=1)
All Ages	0.3383	-0.2480	-0.0393
20-24	0.7315	-0.5019	-0.3244
25-29	0.9192	-0.6832	-0.5384
30-34	0.7995	-0.6134	-0.4604
35-39	0.5891	-0.4578	-0.3223
40-49	0.6018	-0.4545	0.2603
50-65	0.0	0.0	0.0
Constant	-1.3443	-1.1495	-1.2532
Sig.L.R.*	.19	.18	.50
P.*	.19	.17	.49
Entropy	.008	.015	.014
Concentration	.007	.015	.013
Number of Cases	11,182	12,689	12,484

* See footnote on Table 6.10

experienced marriage before age 20 (remembering that the parameters for those currently married have been set to zero, thus serving as the basis for comparison).

Examining the current age groups, the odds ratio of lone to married mothers is greater than one up to age 39; at age 40-49 it is less than one ($e^{-.06}=.94$). These results generally conform with those of the cross-classifications in the previous chapter which reveal the atypical behaviour in the 40-49 age group. It could be expected that higher odds in favour of lone parents would appear in the youngest age group, as evidenced in Appendix Table 5. This discrepancy could be attributed, in part, to the disaggregation of data by age group and small cell frequencies sometimes occurring, particularly in the youngest age group, which could render some estimates unreliable.[3]

Turning to the intermediate variables, for all ages combined, the interaction of (some) post-secondary education with early marriage predicts an odds ratio of .79 ($e^{-.24}$). In other words, of female parents who have experienced early marriage, lone mothers are about three-quarters as likely as those currently married to have attained some post-secondary education. The youngest age group, 20-24 years, reveals that lone mothers would be less than half ($e^{-.71}=.49$) as likely as those currently married to have done so.

The early marriage and first employment relationship reveals that lone mothers were one and a half times ($e^{.43=1.54}$) more likely than those currently married not to have started working until after their first marriage. The odds ratio is high in the youngest age group ($e^{.26}=1.30$), but peaks at 1.34 ($e^{.29}$) in age group 40-49. While the combined values of early marriage with the intermediate variables produced a negative effect in the case of post-secondary educational attainment, the effect using delayed work experience is revealed to be positive.

Table 6.2 provides the early marriage results for the United States. For all ages, the odds are 1.40 ($e^{.34}$) to one that lone mothers are more likely than those currently married to have married before age 20, which exceeds the odds estimated above for Canadian lone mothers. The two youngest age groups, ages 20-24 and 25-29, reveal odds that are greater than two ($e^{.73}$=2.1 and $e^{.92}$=2.5, respectively) in favour of lone mothers. For the older two age groups, ages 35-39 and 40-49, the odds ratios for lone mothers decline to 1.8 in both cases. These results follow a pattern similar to that revealed in the previous analysis. The crosstabulated percentages are higher for lone mothers and particularly in the youngest age group (see Appendix Table 5).

The interaction of post-secondary education produced, for all ages, an odds ratio almost identical to that for Canada ($e^{-.25}$=.78). The pattern by specific age group is also similar to that for Canada, although better odds are shown for American lone mothers in the youngest age group. For American lone mothers aged 20-24 who married early, the probability of attaining some post-secondary education is 61% ($e^{-.50}$) of that predicated for those currently married; this compares to a corresponding ratio of less than half ($e^{-.71}$=.49) for Canada.

The association of first marriage and first work experience, however, reveals some surprising differences compared to the Canadian findings. For all ages, the odds ratio is just .96 ($e^{-.04}$) -- meaning American lone and married mothers were almost equally likely not to have started working until after their first marriage. By specific age group the odds are less than one with one exception -- lone mothers aged 40-49 were nearly one and a third times ($e^{.26}$=1.30) more likely than those married not to have worked until after their first marriage, which is consistent with the corresponding findings for Canada.

The early marriage estimates for both countries are significant at the .05 level or well above with one exception -- the Pearson chi-square probability of .04 in Table 6.1. The disaggregation of data by age groups may generate some relatively small expected counts, a condition which applies to Table 6.1. When this occurs the likelihood-ratio chi-square value is a more appropriate measure than the Pearson chi-square and, based on the value of the former, the model appears to fit the data reasonably well.[4]

The measures of association -- entropy and concentration -- are very small. As pointed out in Chapter 4, these coefficients may be small even when the variables are strongly related.[5] As defined in Chapter 4, the coefficients indicate the proportion of total dispersion in the dependent variable that is attributable to the model.[6] The magnitude of the measures may therefore be interpreted similarly to R^2 in regression, although it is advised that this can be misleading.[7] Theil illustrates, for example, that entropy is typically smaller than R^2.[8] With the addition of the intermediate variables in Tables 6.1 and 6.2, both measures show an increase, although slight, in the ratio of dispersion explained by the model, or conversely, a slight reduction in uncertainty.

Early Childbearing

Table 6.3, for Canada, follows the same format as Table 6.1 but in this case first birth before age 20 is the antecedent variable. For all ages, lone mothers are shown to be more likely than those currently married to have had a first birth before age 20; the odds ratio is 1.36 ($e^{.31}$) which exceeds that for early marriage. In the youngest age group the odds increase to 2.30 ($e^{.83}$) -- hence, lone mothers aged 20-24 are nearly two and a third times more likely than those currently married to have had their first child born before age 20. By age 40-49 the odds approach unity ($e^{-.02}=.98$), but the probability of early child

Table 6.3
Log Odds of Lone to Married Female Parents by Early Childbearing, Post-Secondary Education, First Work Experience and Current Age Group, Canada, 1984

	Independent Variable		
Current Age Group	Early Childbearing (before Age 20=1)	Early Childbearing by Post-Secondary Ed. (some post-sec.=1)	Early Childbearing by First Work Experience (after 1st birth=1)
All Ages	0.3060	-0.2803	0.6218
20-24	0.8329	-0.3459	1.2102
25-29	0.0329	-0.5464	0.4892
30-34	0.1135	-0.6153	0.3331
35-39	0.0360	-0.5467	0.3573
40-49	-0.0200	-0.5331	0.4212
50-65	0.0	0.0	0.0
Constant	-1.8661	-1.7830	-2.0629
Sig.L.R.*	.31	.89	.35
P.*	.32	.89	.36
Entropy	.015	.016	.018
Concentration	.012	.013	.015
Number of Cases	3,936	3,970	3,476

*See footnote on Table 6.10.

Table 6.4
Log Odds of Lone to Married Female Parents by Early Childbearing, Post-Secondary Education, First Work Experience and Current Age Group, United States, 1985

	Independent Variable		
Current Age Group	Early Childbearing (before Age 20=1)	Early Childbearing by Post-Secondary Ed. (some post-sec.=1)	Early Childbearing by First Work Experience (after 1st birth=1)
All Ages	0.6338	-0.1150	0.5637
20-24	1.1561	-0.3419	1.1408
25-29	0.5185	-0.4862	0.5216
30-34	0.3884	-0.3501	0.3649
35-39	0.4354	-0.1510	0.3804
40-49	0.4194	-0.1269	0.3614
50-65	0.0	0.0	0.0
Constant	-1.2620	-1.2946	-1.2304
Sig.L.R.*	.11	.14	.19
P.*	.11	.13	.19
Entropy	.011	.013	.016
Concentration	.013	.013	.019
Number of Cases	12,511	12,511	13,237

* See footnote on Table 6.10.

bearing is slightly higher for married mothers, thus conforming with the cross-tabulations.

The interaction of the post-secondary education variable produces results very similar to those for the early marriage and education relationship. For lone mothers of all ages who experienced an early childbirth, three-quarters ($e^{-.28}$=.75) are as likely as those currently married to have attained some post-secondary eduction. The odds diminish over the current age groups; for example, of lone parents aged 20-24 who had an early first birth, 70% ($e^{-.35}$) are as likely as those currently married to have attained (some) post-secondary while just 59% ($e^{-.53}$) of those aged 40-49 are as likely to have done so.

The association between early childbirth and first work experience appears stronger than the corresponding relationship shown for early marriage in Table 6.1. For all ages, lone mothers are close to twice ($e^{.62}$=1.86) as likely as those married not to have started working until after an early childbirth. In the 20-24 age group lone mothers are about three and a third times ($e^{1.21}$=3.35) more likely not to have done so. Throughout the remaining age groups the odds are substantially greater than one in favour of lone mothers whose first work experience appears to have been delayed due to early childbearing. Overall, these findings are consistent with those revealed in the cross-classification tables (see Appendix Tables 6, 8 and 9).

Table 6.4 contains the early childbirth findings for the United States. The chance of having a first childbirth before age 20 is greater for American than Canadian lone mothers -- for all ages, the odds ratio is 1.88 ($e^{.63}$), or more than 1 3/4 compared to about 1 1/3 for Canada as noted above. These odds for American lone parents also exceed the odds that are predicted regarding their likelihood of early marriage.

For ages 20-24, American lone mothers are shown to be over three times

($e^{1.16}=3.18$) more likely than those currently married to have had an early childbirth, which surpasses the ratio regarding early marriage for the United States (Table 6.2) as well as the corresponding ratio for Canada (Table 6.3). In all of the remaining current age groups the odds ratio is greater than one.

Results from the interaction of post-secondary education are quite similar to those for Canada (Table 6.3). American lone mothers who have experienced childbirth at an early age are less likely than those currently married to have attained (some) post-secondary education; the odds ratio is .89 ($e^{-.12}$). These results differ from those for Canada in that the odds increase over the current age groups rather than decrease, as shown for Canada and as would be expected. The analysis in the previous chapter reveals that the percentage of lone and married mothers with post-secondary education generally peaks at age 30-39, then declines (see Appendix Table 20). The Canadian odds ratio follows this pattern while the ratio for the United States does not. This discrepancy, as noted in the previous chapter, could be due to the difference in the survey question asked.[9]

The early childbearing and first employment relationship predicts results consistent with those for Canada. For all age groups, American lone mothers are one and three-quarters times ($e^{.56}=1.75$) more likely than those currently married not to have started working until after an early childbirth. For ages 20-24, lone mothers are over three times ($e^{1.14}=3.13$) more likely not to have done so.

The early childbearing results in all models for both countries are revealed to be significant well above the .05 level. Entropy and concentration are consistently small, as in the early marriage models, although a slight increase can be observed with the addition of the intermediate variables, mainly in the table for Canada.

Current Characteristics

As noted above, the independent variables relating to the current characteristics fall into three groupings and are examined according; the groups include the demographic, social and economic independent variables.

Demographic Independent Variables

In this portion the demographic independent variables are concerned with the number of marriages (coded 1 for 1 marriage), number of children (coded 1 for less than 3 children), and first marriage dissolution (coded 1 for separation/divorce). The results appear in Table 6.5 for Canada and Table 6.6 for the United States.

Number of Marriages

Table 6.5, for Canada, indicates that lone mothers are less likely than those currently married to have had just one marriage; for all ages, 18-65, the odds are .76 ($e^{-.27}$) to one. The estimates by specific age group are similar with the odds being less than one throughout. The youngest age group, 18-24, reveals odds that are virtually the same as those shown for all ages combined ($e^{-.28}$=.75), but in the 25-29 age group the odds ratio drops to .57 ($e^{-.57}$) -- hence, lone mothers of this age are just over half as likely as those currently married to have had only one marriage.

Table 6.6 contains the results regarding the number of marriages for the United States. The pattern revealed is similar to that disclosed for Canada. For all age groups the odds ratio is virtually equal to that shown for Canada at .75 ($e^{-.29}$) and the results by age group are also a close match. Nevertheless, the implications of the American findings are quite different. As both lone and married American mothers were likely to experience two+ marriages, the odds of having just one marriage in favour of lone mothers are

Table 6.5
Log Odds of Lone to Married Female Parents by Number of Marriages, Number of Children, First Marriage Dissolution and Current Age Group
Canada, 1984

	Independent Variable		
Current Age Group	Number of Marriages (1 marriage=1)	Number of Children (<3 children=1)	First Marriage Dissolution (sep[1]div[2]=1)
All Ages	-0.2684	0.3516	0.4392
18-24	-0.2841	0.7763	
25-29	-0.5675	-0.1061	0.6557[3]
30-34	-0.4852	-0.1661	
35-39	-0.3050	-0.0389	
40-49	-0.2192	-0.0573	-0.2936[4]
50-65	0.0	0.0	0.0
Constant	-1.7048	-1.9552	-1.2464
Sig.L.R.*	.97	.17	.08
P.*	.98	.25	.05
Entropy	.005	.018	.039
Concentration	.003	.014	.036
Number of Cases	3,785	3,902	625

[1] Separation
[2] Divorce
[3] Age 18-29
[4] Age 30-49

* See footnote on Table 6.10.

Table 6.6
Log Odds of Lone to Married Female Parents by Number of Marriages, Number of Children, First Marriage Dissolution and Current Age Group
United States, 1985

	Independent Variable		
Current Age Group	Number of Marriages (1 marriage=1)	Number of Children (<3 children=1)	First Marriage Dissolution (sep[1]div[2]=1)
All Ages	-0.2856	-0.0469	0.3078
18-24	-0.2788	0.8185	
25-29	-0.4395	0.0458	0.5454[3]
30-34	-0.4078	-0.1749	
35-39	-0.2608	-0.1714	0.4137[4]
40-49	-0.2334	-0.2229	0.0232
50-65	0.0	0.0	0.0
Constant	-0.9766	-1.1380	-0.9583
Sig.L.R.*	.06	.27	.25
P.*	.05	.26	.29
Entropy	.005	.019	.023
Concentration	.005	.021	.021
Number of Cases	12,770	13,695	2,032

[1] Separation
[2] Divorce
[3] Age 18-29
[4] Age 30-39

* See footnote on Table 6.10.

consequently lowered . These findings conform factually with the crosstabulations which show a higher proportion of two+marriages in the American case (Appendix Table 12).

Number of Children

Appendix Table 17 estimates that, for Canada, the average number of children ever born to lone and to married mothers is 2.4 and 2.6, respectively. **Table 6.5** indicates that, for all ages, Canadian lone parents are 1.4 ($e^{.35}$) times more likely than those currently married to have had less than three children; lone parents aged 18-24 are more than twice ($e^{.78}$=2.2) as likely to have done so. As age increases the odds decrease reaching an almost equal probability of .94 ($e^{-.06}$) by age 40-49. It could be concluded that completed family size in the older age groups exceeds two children, particularly for lone mothers, as the crosstabulations in the previous chapter indicate.

Table 6.6 for the United States indicates that, for all ages, the probability of having less than three children is fairly equal ($e^{-.05}$=.95) between lone and married mothers. In the youngest age group, however, American lone mothers are more than twice ($e^{.82}$=2.27) as likely as those currently married to have had one or two children, which is slightly greater than the corresponding ratio for Canada. In the remaining age groups the odds decline to approximately .80 to one, indicating that lone mothers in the older age groups with completed families are less likely than those currently married to have had just one or two children. These findings are quite similar yet somewhat more profound than those revealed above for Canada.

First Marriage Dissolution

Table 6.5 reveals that Canadian lone mothers of all ages, 18-65, are one and a half ($e^{.44}$=1.55) times more likely than those currently married to have dissolved their first marriage through separation and/or divorce. Within the youngest age group, 18-29, this probability increases to almost twice (e^{66}=1.95) as often that lone mothers have done so. For ages 30-49, the likelihood of separation and divorce reverses as the odds ratio of lone to married mothers reduces to .75 (e^{-29}). This could be attributed to the marked increase in widowhood to lone mothers in this sample (particularly for those aged 40-49), which is revealed in Appendix Table 14.

Table 6.6 portrays a pattern of first marriage dissolution for the United States which can be misleading. Encompassing all age groups, lone mothers are about one and a third (e^{31}=1.36) times more likely than those currently married to have dissolved their first marriage through separation and/or divorce. This again reflects the higher incidence of separation/divorce among both lone and married American mothers which lowers the odds in favour of lone mothers and produces odds lower than those for Canada. In the youngest age group, 18-29, lone mothers are one and three-quarters times (e^{55}=1.73) more likely than those currently married to have ended their first marriage through separation or divorce, for age group 30-39, the odds ratio is 1.51 (e^{41}). In the oldest age group the probability becomes almost equal (e^{02}=1.1) between the two parent types.

The results for the demographic independent variables are significant at the .05 level in all models and for both nations. The significance level is exceptionally high for the 'number of marriages' in the Canadian table as it reflects a large portion of the sample -- that is, 75% of Canadian female parents in the sample experienced just one marriage. Consequently, the model fits the data very well. Entropy and concentration indicate that the 'marriage dissolution' models for both countries explain the highest proportion of dispersion in the dependent variable compared to the other demographic models.

Social Independent Variables

The effects of the social characteristics on female parents are examined in this portion. The independent variables include post-secondary education (coded 1 for some post-secondary), labour force status (coded 1 for participant -- employed or unemployed seeking work) and occupation (coded 1 for managerial or professional occupations).

Post-Secondary Education

The estimates predicted in **Table 6.7** are consistent with the crosstabulated results in Appendix Table 20. Canadian lone mothers are less likely than those currently married to have attained some post-secondary education; for all ages combined, the odds ratio is .72 ($e^{-.33}$). The odds remain less than one throughout the age groups with the lowest ratio appearing in the 30-34 age group; at this point lone mothers are just over half ($e^{-.62}$=.54) as likely as those married to have obtained some post-secondary schooling.

Table 6.8 for the United States corresponds with the finding above for Canada. For all age groups combined the odds ratio is .78 ($e^{-.25}$).The anomaly occurs in age group 30-34 where the odds decline to .54, matching the low point for Canada. The increase in ratios following this age group, for both countries, supports the assumption gleaned from the previous chapter that lone mothers did indeed return at a later age to obtain some post-secondary schooling.

Labour Force Status

Table 6.7 indicates that Canadian lone mothers are more likely to be labour force participants than are married mothers; for all ages the odds are nearly one and a half to one ($e^{.38}$=1.46). The most remarkable ratio appears in the youngest age group where lone mothers are predicted to be 2.80 times ($e^{.38}$) more likely than those currently married to

Table 6.7
Log Odds of Lone to Married Female Parents by Post-Secondary Education, Labour Force Status, Occupation, and Current Age Group
Canada, 1984

	Independent Variable		
Current Age Group	Post-Secondary Education (some=1)	Labour Force Status (participant[1]=1)	Occupation (manager/ professional=1)
All Ages	-0.3324	0.3807	-0.0417
18-24		1.0334	-0.6080
25-29	-0.2333[2]	0.0410	-0.3329
30-34	-0.6152	0.0706	-0.4954
35-39	-0.5467	0.0121	-0.3517
40-49	-0.5331	0.0420	0.2656
50-65	0.0	0.0	0.0
Constant	-1.7830	-2.0071	-1.6929
Sig.L.R.*	.89	.95	.24
P.*	.88	.95	.24
Entropy	.026	.029	.027
Concentration	.023	.026	.025
Number of Cases	3,970	3,970	2,957

[1] Includes employed and unemployed seeking work.
[2] Ages 18-29 years.

* See footnote on Table 6.10.

Table 6.8
Log Odds of Lone to Married Female Parents by Post-Secondary Education, Labour Force Status, Occupation, and Current Age Group
United States, 1985

	Independent Variable		
Current Age Group	Post-Secondary Education (some=1)	Labour Force Status (participant[1]=1)	Occupation (manager/ professional=1)
All Ages	-0.2480	0.3987	-0.3543
18-24		1.0858	0.0495
25-29	-0.5019[2]	0.4056	-0.5189
30-34	-0.6134	0.1866	-0.5815
35-39	-0.4578	0.1775	-0.4800
40-49	-0.4545	0.1486	-0.6306
50-65	0.0	0.0	0.0
Constant	-1.1495	-1.4152	-0.8336
Sig.L.R.*	.05	.06	.07
P.*	.06	.06	.07
Entropy	.015	.027	.021
Concentration	.015	.029	.023
Number of Cases	13,531	13,237	8,741

[1] Includes employed and unemployed seeking work.

2 Ages 18-29 years.

* See footnote on Table 6.10.

be in the labour force. The odds are closer to unity in the remaining age groups -- that is, both parent types are about equally likely to be working or seeking work.

Table 6.8 reveals a pattern of labour force participation for the United States that is very similar to that above for Canada. For all ages, American lone mothers are, similarly, about one and a half times ($e^{.40}$=1.49) more likely than those married to be labour force participants. In the youngest age group, 18-24, the odds are close to three ($e^{1.09}$=2.97) to one. In the following age groups the odds in favour of lone mothers remain higher than those above for Canada, which is consistent with the findings in Appendix Table 22.

It was previously found (Tables 6.1-6.4) that the antecedent variables -- first marriage and first birth before age 20 -- are likely to delay entry into the labour force. The findings in Tables 6.7 and 6.8 suggest that, when the effect of the antecedent variables is not accounted for, lone mothers aged 18-24 in both countries are indeed more likely than those currently married to be working or seeking work.

Occupation

Table 6.7 predicts that, for all age groups, Canadian lone mothers are almost as likely as those currently married to be employed in managerial or professional occupations; the odds ratio is .96 ($e^{-.04}$). The ratio remains less than one throughout the age groups with the exception of the age 40-49 group where it increases to 1.31 (*e*.27) ; thus, lone mothers of this age are nearly one and a third times more likely than those married to have managerial or professional employment.

Table 6.8 indicates that American lone mothers are less likely to be occupied in managerial or professional positions than are married mothers; the odds ratio is .70 (*e*-.35), which is lower than that for Canada. The age groups portray a pattern which is the reverse of that shown for Canada -- that is, the youngest age group reveals odds greater than one while the odds for the last age group (40-49) are well below one ($e^{-.63}$=.53). This comparison of the two countries appears somewhat erratic. The results overall, however, do conform with the primary finding of the previous chapter -- while fewer female parents of either type appear in the managerial or professional occupations, lone mothers, on average, are slightly less likely than married mothers to be employed in these occupations.

In the Canadian tables, the likelihood-ratio and Pearson chi-square values indicate that the models containing the social independent variables fit the data well. The corresponding American values are less significant but meet the .05 criterion. These variables, with the exception of occupation, capture a larger proportion of the total sample population compared to the antecedent variables, thus rendering higher significance levels. Division of the data into subgroups is generally more problematic with the Canada sample as it is just one-third the size of the American sample.

After becoming accustomed to very small entropy and concentration values in the previous tables, the social variables appear to exhibit stronger measures of association. The ratios indicate a slight but consistent increase in the proportion of dispersion explained by the model.

Economic Independent Variables

The economic characteristics are based on income, the number of income earners and home ownership. As the former two variables were not collected in the Canadian study, comparisons are drawn using post-secondary education (substituted for income) and home ownership only. While national comparisons are therefore restricted, estimates for

Table 6.9

Log Odds of Lone to Married Female Parents and Lone to Married Male Parents by Family Income, Number of Income Earners, Home Ownership, and Current Age Group United States, 1985

	Independent Variable					
Current Age Group	Income (<$20,000=1)		Income by No. of Earners (<$20,000 income =1) (<2 earners=1)		Home Ownership (own dwelling = 1)	
	Female	Male	Female	Male	Female	Male
All Ages	2.0226	0.1609	2.4809	0.4209	-1.4507	-0.0921
18-29	1.9031	0.8039	2.2666	0.4662	-1.7715	- -
30-34	1.6951	0.1101	2.0421	0.3502	-1.9031	-0.2202
35-39	1.8452	0.0978	2.2605	0.3522	-1.6640	-0.2057
40-49	1.8594	0.1952	2.4132	0.5492	-1.3957	0.0712
50-65	0.0	0.0	0.0	0.0	0.0	0.0
Constant	-1.7464	-2.0170	-1.9489	-2.8013	-0.0133	-2.9775
Sig.L.R.*	.05	.01	0.05	.001	.11	.001
P.*	.05	.01	0.04	.001	.12	.001
Entropy	.150	.269	.168	.281	.173	.279
Concentration	.179	.268	.199	.280	.187	.281
Number of Cases	13,276	12,004	13,276	12,004	13,683	12,004

See footnote on Table 6.10.

Table 6.10
Log Odds of Lone to Married Female Parents and Lone to Married Male Parents by Post-Secondary Education[1], Home Ownership, and Current Age Group Canada, 1984

Current Age Group	Post-Secondary Education (some=1)		Home Ownership (own dwelling=1)	
	Female	Male	Female	Male
All ages	-0.3324	0.0803	-1.7501	-0.9019
18-29	-0.3415	-0.6644	-2.1304	-2.1430
30-34	-0.6152	-0.2803	-2.0945	-1.3654
35-39	-0.5467	-0.3761	-2.0488	-1.2263
40-49	-0.5331	-0.4589	-1.7876	-1.0927
50-65	0.0	0.0	0.0	0.0
Constant	-1.7830	-2.9639	-0.3327	-2.1450
Sig. L.R.*	.89	.75	.18	.51
P.*	.88	.77	.17	.53
Entropy	.026	.009	.092	.023
Concentration	.023	.003	.081	.007
Number of Cases	3,970	3,422	3,966	3,421

Independent Variable

[1] Post-secondary education is substituted for family income data which were not collected in the Canadian survey.

* Significance level for the goodness-of-fit statistics Likelihood Ratio chi-square and Pearson chi-square.

male parents in each country are included in hopes of shedding more light on the economic picture, particularly regarding lone mothers.

In Table 6.9 for the United States, the independent variables are family income (coded 1 for less than $20,000), number of income earners (coded 1 for less than 2 earners) and home ownership (coded 1 for dwelling owned). Table 6.10 for Canada contains post-secondary education (coded 1 for some post-secondary) and home ownership coded as above.

Family Income

Table 6.9 for the United States reveals that lone mothers are worse off than lone fathers with respect to income. Considering all ages combined, lone mothers are about seven and a half times ($e^{2.02}=7.54$) more likely than married mothers to have an income of less than $20,000. On the other hand, while lone fathers are less likely than married fathers to have an income this low; the odds are more in their favour, 1.2 to one ($e^{.16}$).

The youngest age group predicts the highest ratios for both lone parent types. Lone mothers aged 18-29 are over six and two thirds times ($e^{1.90}=6.69$) more likely than married mothers to receive less than $20,000 in income while, for lone fathers, the odds ratio is considerably less at 2.23 ($e^{.80}$). In the following age groups the odds remain at about the same level for lone mothers while for lone fathers they are just above one, or close to being equal to those of married fathers. In other words, compared to their married counterparts, lone fathers at later ages appear to improve their economic status while lone mothers do not.

Number of Income Earners

Introducing the number of earners as an interaction term emphasizes the differences between the incomes of both male and female lone and married parents. With interaction, the combination of variables (values) produces a 'boost' to the ratios in favour of lone parents with low incomes. Compared to married mothers, lone mothers, as sole earners, are twelve times ($e^{2.48}$=11.95) more likely to have incomes of less than $20,000; compared to the predicted income of married fathers, lone-earner fathers are one and a half times ($e^{.42}$=1.52) more likely to have an income this low. Examining the age groups, the ratio for female parents is highest among the youngest and oldest -- lone-earner mothers aged 18-29 are over nine times ($e^{2.27}$=9.68) more likely than those married to have incomes less $20,000 and for those aged 40-49 the odds increase to 11.13 ($e^{2.41}$). The estimate for lone-earner fathers follows the same pattern. It is high in the youngest age group at 1.59 ($e^{.47}$), although substantially lower than that for lone mothers, and highest in the 40-49 age group ($e^{.55}$=1.73).

Home Ownership

It was anticipated that home ownership would be combined with income as an interaction term. With lone mothers being concentrated in the lower income category and few married mothers or lone fathers appearing in this category, the results were neither significant nor of any informative value. The main effects of home ownership revealed in Table 6.9 are consistent with those in Appendix Table 33. For all age groups, the odds of home ownership for American lone mothers are just 23% of those predicated for married mothers. Estimates for lone mothers in the youngest age group show the smallest probability at just 17% ($e^{-1.78}$) of predicated home ownership. Lone fathers compare more favourably with married fathers as some ratios are approaching unity; for example, the ratio for all ages combined is .91 ($e^{-.09}$), and that for ages 40-49 is 1.1 ($e^{.07}$).

As the Canadian survey did not collect data on neither income nor the number of income earners, a comparison is drawn using post-secondary education (substituted for income) as well as home ownership in an attempt to elucidate some comparative socio-economic characteristics among the parent types.

The post-secondary education results for Canadian female parents were discussed previously under Table 6.7. The ratios in **Table 6.10** indicate that lone fathers compare to married fathers more favourably than do lone mothers to their married counterparts. Considering all age groups, the likelihood of lone mothers having attained some post-secondary is about 72% of that predicted for married mothers while the ratio of lone to married fathers is close to being equal ($e^{.08}=1.1$). Young lone fathers, however, account for just 51% ($e^{-.66}$) of the predicted post-secondary attained by married fathers.

The comparison of home ownership for female parents indicates that Canadian lone mothers are far less likely than those married to own their home and slightly less likely than their American counterparts to do so. For Canadian lone fathers the results are surprisingly similar; they are remarkably less likely than Canadian married fathers and comparatively less likely than American lone fathers to own their home. For all ages combined, the odds of Canadian lone mothers owning their home is just 17% ($e^{-1.75}$) of that predicated for married mothers; for Canadian lone fathers, compared to those married, the odds are less than half ($e^{-.90}=.41$). For both lone parent types in Canada the ratios remain well below one throughout the age groups.

The economic estimates for the United States (Table 6.9) stand out because of their lack of conformity with the previous findings regarding the levels of significance and the measures of association. First, while all chi-square values are significant at the .05 level for female parents, none are significant at this level for male parents. One reason the latter models do not fit the data may stem from the differences in the distribution of the economic variables between lone and married fathers. On the other hand, the measures of association stand out because they are considerably higher than any revealed in the previous tables, and highest for male parents. In summary it could be stated that the economic estimates for the United States are significant at the .05 and .001 levels. Also, the measures of association appear relatively strong with models explaining from 15% to 28% of the total dispersion in the dependent variables.

The (substitute) economic estimates for Canada (Table 6.10) reveal more conservative results. The likelihood-ratio and Pearson chi-square probabilities are well above the .05 level for both male and female parents. The proportion of variance explained by the models, as revealed by the values of entropy and concentration, is higher for female parents than for male parents, which is the reverse of the findings in the previous table for the United States.

Summary and Conclusions

Antecedent Characteristics

The results of the logit analysis confirm the primary findings revealed in the crosstabulations of the antecedent variables (Chapter 5). The probability of female parents having experienced early marriage and/or early childbearing (before age 20) is greater for lone mothers than for currently married mothers, and early childbearing is revealed to be the strongest predictor of the two antecedent variables for both Canada and the United States. In contrast to the crosstabulations, the likelihood of American lone mothers experiencing either event is revealed to be somewhat greater than that predicated for their Canadian counterparts.

The effect of the early marriage and early childbearing antecedents is emphasized when combined with the intermediate antecedents -- post-secondary education and first work experience -- as interaction terms. With respect to post-secondary education, the interaction effect is negative -- both Canadian and American lone mothers are less likely than those currently married to have attained some post-secondary after an early marriage and/or an early childbirth. Regarding first work experience, the results differ in one respect. The effect of early marriage with first work experience is positive for Canadian lone mothers but close to being equal for American lone and married mothers -- that is, Canadian lone mothers are more likely not to have started working before an early marriage while American lone and married mothers are about equally likely not to have done so. The effect of early childbirth with first work experience, however, produced a strong positive effect for both nations -- Canadian and American lone mothers are considerably more likely than married mothers not to have started working until after an early first childbirth (before age 20).

The results for the antecedent variables are significant at the .05 level or better. Entropy and concentration, on the other hand, are consistently small. In quantitative regression analysis, calculations done with aggregated data typically yield high R^2 values while calculations done with disaggregated data yield low R^2 values. Also, adding variables to the regression equation may increase the proportion of variance explained and, consequently, the magnitude of R^2.[10] Using entropy and concentration as qualitative analogues to R^2 suggests that the magnitude of these measures could also be interpreted similarly.[11] With respect to the first point, it is notable that a finer division of the antecedent data was necessarily applied while the data on current characteristics generally represent a larger proportion of the total sample and, as with R^2, the disaggregation of data contributes to smaller calculations of entropy and concentration.[12] Secondly, the logit model should be kept as simple as possible. If a parsimonious model fits the data well, this simpler model is usually preferable and less difficult to interpret; hence, the addition of variables is not always profitable.[13] The more simplistic models used in this portion of the analysis could also contribute to the low entropy and concentration values. Norusis advises that entropy and concentration are "best interpreted in the light of experience".[14] This analysis interprets the measures in the light of comparative values -- that is, the comparative variation in magnitude.

Current Characteristics

A most remarkable finding, as previously pointed out in the Chapter 5 summary, is the similarities that persist in the comparisons of Canadian and American lone parents. The results of the logit analysis generally parallel the findings revealed in the cross-classification tables, although the log-odd estimates predict some subtle differences while the interaction effects, in some instances, emphasize the similarities.

The current characteristics were analysed in three groupings including the demographic, social and economic independent variables. In the demographic group, the odds of experiencing just one marriage appear to be almost identical for Canada and the United States, but these findings can be misleading. The incidence of two+ marriages is considerably higher in the United States than in Canada, as revealed in the previous chapter. Both lone and married American mothers, however, are likely to experience two+ marriages which simply lowers the odds in favour of lone mothers. The odds ratio of first marriage dissolution through separation or divorce also favours Canadian lone mothers to a greater extent than the corresponding American ratio, again reflecting the finding that divorce is more prevalent among both lone and currently married American female parents, thus lowering the odds in favour of American lone mothers. The estimates of the social characteristics -- namely, post-secondary education and labour force status, are remarkably similar for Canada and the United States. The odds of Canadian lone parents being employed in managerial or professional occupations, however, are somewhat greater than those predicted for their American counterparts.

The variables relating to income reveal some differences between American lone mothers and lone fathers. (Income data were not collected in the Canadian survey.) While lone mothers are shown to be considerably more likely than married mothers to appear in the low income category (<$20,000), lone fathers are just slightly more likely to be in this category compared to married fathers, with some odds ratios approaching unity. The interaction effect of the 'number of income earners' emphasizes the income differential, elevating the ratio in favour of lone mothers and lone fathers with low incomes. The economic findings also indicate that American lone fathers are nearly as likely as married fathers to own their home, while lone mothers are far less likely than married mothers to do so. The home ownership ratios for Canadian lone parents are similar to the United States estimates for lone mothers but indicate that Canadian lone fathers, with odds of less than a half to one, do not fare nearly so well as their American counterparts in this respect.

The effect of the current independent variables on lone parenthood produced significant results at the .05 level in all tables with the exception of the income models for males. The fact that the male income models do not fit the data well could be attributed to, first, the comparatively small size of the male lone parent sample and second, an uneven distribution of income between male lone and married parents.[15] On the other hand, some of the current independent variables, such as post-secondary education and labour force status, yield very high levels of significance. In these instances the variables include a large portion of the total sample and, consequently, the models fit the data well.

Entropy and concentration, from a comparative point of view, reveal higher measures of association for the current models than are shown for the antecedent models. Among the demographic (current) models, 'first marriage dissolution' explains the highest proportion of dispersion in the dependent variable for both Canada and the United States. The models representing the social characteristics reveal ratios of dispersion explained that are fairly equal in value across the three models for each country. The economic models stand out with substantially higher ratios of explained to total dispersion. The proportion explained varies from 15% to 28% of the total dispersion with the income related models for males showing the larger percentages.

Notes

[1] Agresti, Alan and Barbara Finlay, Statistical Methods for the Social Sciences Second Edition (San Franciso: Dellen Publishing Company, 1986), 482.

[2] Norusis, Marija J., SPSS Advanced Statistics 6.1 (Chicago: SPSS Inc., 1994), 176; Swafford, Michael, "Three Parametric Techniques for Contingency Table Analysis: A Nontechnical Commentary," American Sociological Review 45 (August, 1980): 672.

[3] Pool, Ian and Maureen Moore, Lone Parenthood: Characteristics and Determinants (Ottawa: Minister of Supply and Services, 1986), 19.

[4] Norusis, 200.

[5] Haberman, Shelby J., "Analysis of Dispersion of Multinomial Responses," Journal of the American Statistical Association 77 (September, 1982): 572-573; Norusis, 216.

[6] Norusis; 216.

[7] Aldrich, John H. and Forrest D. Nelson, Linear Probability, Logit, and Probit Models, Series: Quantitative Applications in the Social Sciences (Beverly Hills: Sage Publications, Inc., 1984), 56-57; Cohen, Jacob and Patricia Cohen, Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences 2nd edition (Hillsdale, New Jersey: Lawrence Erlbaum Associates, Publishers, 1983), 86; Magidson, Jay, "Qualitative Variance, Entropy, and Correlation Ratios for Nominal Dependent Variables," Social Science Research 10 (1981): 178; and Swafford, 687.

[8] Theil, Henri, "On the Estimation of Relationships Involving Qualitative Variables," The American Journal of Sociology 76 (1970): 133.

[9] The Canadian survey collected elementary/secondary and post-secondary data in two separate questions asked of the total population; the United States survey collected highest level of education from the total population in one question. The results are therefore not directly comparable.

[10] Duncan, Otis Dudley, Introduction to Structural Equation Models (New York: Academic Press, Inc., 1975), 65-66.

[11] Magidson, 178-183.

[12] Theil, 133-134.

[13] Norusis, 157.

[14] Norusis, 216.

[15] Norusis, 178.

CHAPTER 7

SUMMARY AND CONCLUSIONS

The limitations of the Canadian and American data files mainly stem from the fact that neither survey was designed to collect information on female lone parent families per se. This necessitates a finer disaggregation of the data, e.g., by parent type, and a more complex data base from which to eke out the desired information. Also, certain variables pertinent to the study of female lone parenthood were not collected in either survey; such variables include religion, ethnicity, health, housing and, in the Canadian case, family income. Surveys designed to target female lone-parent families could greatly reduce or eliminate these limitations. The retrospective nature of both surveys also produces the potential for limitations; notably, the cohort experience is complete for some respondents but incomplete for others, thus leaving certain aspects of the analysis incomplete as well. This disadvantage is offset, however, by the significant advantage the retrospective technique offers -- that is, the opportunity to explore the antecedent characteristics as well as life-cycle events, while the period data permit the analysis of the current characteristics.

Cross-Classification Analysis

The results of the cross-classifications support the two primary assumptions upon which this study is based. First, the retrospective comparisons indicate that a greater proportion of lone mothers than married mothers experienced marriage and childbearing at an early age. Second, the current comparisons indicate that lone mothers were less well off socially and economically compared to mothers who were married at the time of the survey.

The pattern revealed in these results is remarkably similar for both Canada and the United States. The differences lie, somewhat insignificantly, in the extent of female lone parenthood in each country, and in the magnitude of the variations between the characteristics of lone and married mothers in each country.

The findings for the antecedent and current variables also conform with the series of expectations for the study -- that is, they fulfill the 'cause' and 'effect' structure underlying the theory and analysis. It is the sequence of events that falls between these variables, however, which forms the linkage in the theoretical framework, as outlined in Chapter 2. The intermediate variables, education and employment, provide this linkage and are therefore intrinsic components of the theory.

Antecedent Characteristics

Focusing on the antecedent variables, the negative relationship of marriage and childbearing at an early age with educational attainment and employment experience has been well documented in previous social research (references are noted in the literature review, Chapter 3). In the present study, it was revealed that marriage and/or childbearing at age 20 or under deter post-secondary educational attainment for both lone and married female parents, but it is notable that lone mothers were disproportionately overrepresented in this group of female parents who had experienced early marriage/childbearing. The picture is elucidated more clearly when examining female parents who experienced their first birth at age 25 or over where over half of currently married mothers had attained some post-secondary education while only about one-third of lone mothers (higher for Canada at 37.8%) had done so. It was also revealed that lone mothers were considerably more likely than those married not to have started working until after their first birth. While a direct causal link cannot be established, these findings strongly indicate that the responsibilities of marriage and particularly childbearing at an early age had a negative effect on the intermediate variables, education and employment. Based on these findings it can be concluded, as hypothesized, that both Canadian and American lone mothers were more likely than married mothers to experience marriage and childbearing at an early age, and that these characteristics tend to deter educational attainment and delay work experience.

The antecedent variables are critical because they affect the very young female at the initial stage of her family life-cycle. As the median age of females at first marriage has risen since the 1970s (in 1991 it reached age 26 in Canada and age 24 in the United States), it could be argued that early marriage and childbearing may wane as determinants of female lone parenthood in the 1990s. On the other hand, research reveals that the incidence of never-married mothers, which usually occurs at a very early age, is increasing in both Canada and the United States. In either case, higher divorce rates in both countries could be expected to sustain or even increase female lone parenthood, but could possibly shift the phenomenon to higher age groups.

Current Characteristics

Turning to the current variables, this portion of the analysis examined the end result of the antecedent chain of events -- that is, the demographic and socio-economic characteristics of lone mothers compared to married mothers, and in some cases to lone fathers, on the date of the survey.

Considering the demographic characteristics, it is the marital histories that revealed remarkable differences between Canada and the United States. Lone mothers in both countries were less likely than married mothers to have experienced just one marriage, but the percentage of two+ marriages was considerably higher for the United States than for Canada. Similarly, the percentages for both never-married mothers and never-married fathers, as well as the percentages for separation/divorce for all parent types, was higher for the United States than for Canada.

The primary cause of marital dissolution in both nations was through separation and/or divorce. These findings reveal the distinct shift in recent decades from the death of a spouse to separation/divorce as the major cause of marital dissolution and, consequently, the shift from the older to the younger age groups. Conforming with the findings above regarding the number of marriages, separation and divorce played a larger role in American dissolutions than in Canadian, and the incidence of widowhood was higher in Canadian dissolutions than in American dissolutions.

The average duration of female lone parenthood was about five years for both nations. The longest period was for mothers who had not married by the survey date (8.6 years and 7.8 years on average for Canada and the United States, respectively) and for those who remained widowed from the time of their first marriage to the survey date (7.8 years and 6.6 years on average for Canada and the United States, respectively). The episodes were shortest for separated mothers (about 3 years on average for both countries). For those who remained in the divorced state after a first marriage, the duration was about 51/2 years for lone mothers in both countries; if remarriage followed, the episodes were shorter.

The marital histories reinforce some important facts. First, as marital dissolution has become more concentrated in the younger age groups, so has the critical transition to female lone parenthood. Second, female lone parenthood is in most cases a transitory stage with the most prevalent cause being separation/divorce. The longest period of lone parenthood, however, was endured by never married mothers and mothers who experienced widowhood at an early stage of the family life-cycle. The latter two lone parents types would not likely have acquired sufficient assets or benefits by this early stage of family life and, consequently, could be residing in dire need of economic assistance. Those separated and/or divorced endured shorter episodes. With the incidence of remarriage increasing, the number of transitions could also increase and the lone parent stage would become even shorter. These more transitory lone mothers would need to receive adequate maintenance payments from a former spouse or attain the social and economic skills necessary in order to support their family of dependent children, and in both cases these can be difficult solutions to achieve.

The number of natural children in the family differed very little between lone and married mothers, whether in Canada or the United States. All mothers had about two children on average. When considering the older age groups and completed families, however, lone mothers were more likely than those currently married to have had larger families. This could indicate that lone mothers started their families at an earlier age compared to married mothers, thus reinforcing the effects of the antecedent characteristics.

Examining the total number of children (adopted, step and natural) presents a different picture -- Canadian and American lone mothers were currently raising more children than were lone fathers. When families dissolve through divorce, the custody of children in the majority of cases is granted to the mother. This may also shift the social and economic responsibility of raising the children to the lone mother. More recently there has been a greater acceptance of joint custody in mediated settlements where both parties are in agreement. These settlements can be beneficial to both parents, but the lack of home permanence can sometimes present difficult adjustments for the children involved. In any case, mediated joint custody occurs in a very small proportion of settlements. Only a small minority of separated/divorced lone mothers improve their economic circumstances through such agreements. The never married and young widowed mothers, of course, are without a partner with whom to form such an agreement and must either fend for themselves or apply for help through whatever government assistance programs are in place.

The assumption that early childbearing deters post-secondary educational attainment is substantiated in the current findings. A higher proportion of married mothers than lone mothers in both Canada and the United States completed at least some education at the post-secondary level. It is significant that a small proportion of lone mothers (23% for Canada and 28% for the United States) did manage to attain some post-secondary, in spite of the responsibilities of early childbearing and raising.

While lone mothers were likely to delay their first work experience due to early marriage/childbearing, a larger proportion of lone than married mothers in both nations was currently working at the time of the survey. This very likely indicates a greater need to work on the part of lone mothers. Among female parents who were currently unemployed, a higher proportion of lone than married mothers stated work-related concerns (lack or loss of work) as their primary reason for being unemployed while a higher proportion of married mothers reported personal/family concerns as the primary reason. Further, the duration of unemployment was shorter for lone than married mothers in both countries, again indicating a greater need for lone mothers to work. On the other hand, the duration of unemployment in the youngest age group was longer for lone than married mothers reflecting the influence of early childbearing, a characteristic more prominent among lone mothers, in delaying labour force participation.

The current occupational characteristics did not veer significantly from the traditional pattern as both lone and married mothers remained clustered in the clerical, sales and service occupations. Some inroads were made into the professional field by Canadian lone mothers at later ages, otherwise the majority of both Canadian and American female parents appear in the typically 'female' occupations. These findings do not represent disadvantages experienced by lone mothers per se, but simply reveal a continuation of the long standing trend for all females. The gains made by Canadian lone mothers in the professional occupations may signify a turning point in this trend which could become more apparent in the 1990s.

Family income is the current variable which ultimately summarizes the economic well-being of female lone parents. Unfortunately the Canadian study did not collect income data. The American findings, however, portray the economic situation very clearly. Almost half of the lone mothers were at the low end of the income scale (<$10,000), half of the married mothers were at the higher end of the income scale (>$30,000), and the remaining bulk of both parent types fell in between. The lowest average income was in the youngest age group (18-24 years) where it was <$10,000 for both nations (published data were used for Canada in this comparison). Income increased with age, particularly for lone mothers. This could be attributed to delayed careers achieved or to increased child maintenance or social security benefits which could serve to augment the incomes of lone mothers in advancing age groups.

A significant factor contributing to the income gap between lone and married female parents was revealed to be in the number of income earners per family. Most Canadian and American married mothers are partners in two-earner or even three+-earner families, while the lone mother is the sole family earner. Further, female one-parent families do not totally emerge as one-earner families until the mother reaches age 35. This provides another example of the antecedent chain of events -- that is, the early marriage/childbearing influence in delaying first work experience and the effect of this delay on future employment.

The economic disadvantages of the sole-earner family is also evident in home ownership. Lone mothers were the least likely to own their home, married mothers were the most likely to do so, and lone fathers fell in between the two extremes. It can be speculated that lone fathers were able to continue working throughout their lone-parent years and generated higher incomes than lone mothers. Nevertheless, lone fathers also experienced disadvantages in home ownership as they were coping with dual-earner families which were, and still are, the majority of families.

The overall results for the current characteristics are generally in accordance with those hypothesized -- that is, they reveal the effects of the antecedent chain of events that were expected. It can be concluded that female lone parenthood is indeed a critical stage in the process of family life-cycle development; the critical stage develops from premarital childbearing at an early age, separation/divorce at young to middle ages, or from widowhood which usually occurs at later ages and is therefore less likely to be critical; and, ultimately, the female lone-parent stage is characterized by social and economic disadvantages compared to the characteristics of married female parents.

Loglinear Analysis

The logit models confirmed most of the findings from the cross-classifications and also uncovered some more complex relationships that existed between variables. It is the latter findings that derive from the more sophisticated loglinear analysis that are of particular interest in this portion. The antecedent and current variables were the independent variables. The dependent variable throughout was female parent or, in some instances, male parent -- in either case coded 1 for lone parent and coded 2 for married parent.

Antecedent Characteristics

The logit analysis validated the primary findings for the antecedents -- that is, both Canadian and American lone mothers were found to be more likely than married mothers to have experienced early marriage and early childbearing (before age 20). Early childbearing, however, was revealed to exert the stronger relationship with female lone parenthood, and this held for both countries. On the other hand, American lone mothers were more likely than their Canadian counterparts to experience either event, which is a subtle reversal of the cross-classified results.

The effect of the early marriage and early childbearing antecedents was emphasized when combined with the intermediate variables -- post-secondary education and first work experience -- as interaction terms. Both Canadian and American lone mothers were revealed to be less likely than those currently married to have attained some post-secondary education after an early marriage and/or an early childbirth. With respect to the relationship between first work experience and early marriage, the results of the logit again deviated from the crosstabulations. Canadian lone mothers were revealed to be more likely than those married not to have started working before an early marriage, conforming with the cross-classified results, but American lone and married mothers were about equally likely not to have done so, conflicting with the cross-classified results. The relationship between first work experience and early childbearing, however, produced a strong positive effect for both nations -- Canadian and American lone mothers were revealed to be considerably more likely than married mothers not to have started working until after an early first childbirth.

The results for the antecedent variables were significant at the .05 level or better. Entropy and concentration were consistently small, mainly due to the finer disaggregation of data required in the analysis of the antecedent independent variables.

Current Characteristics

The logit models of the current characteristics produced results which generally parallel the findings revealed in the cross-classification tables. The current characteristics were analysed in three groupings including the demographic, social, and economic independent variables.

The demographic comparisons indicate that the odds of experiencing just one marriage were very similar for Canadian and American lone mothers, although slightly lower for American lone mothers. This does not indicate conflicting results with the cross-classifications where American lone mothers show a much higher incidence of two+ marriages. It rather accentuates the fact that American married mothers were also likely to experience two+ marriages, which simply lowers the odds in favour of lone mothers in the American findings. Both Canadian and American lone mothers were more likely than those currently married to have dissolved their first marriage through separation/divorce. The odds for American lone mothers are again lower than those for their Canadian counterparts, similarly reflecting the fact that both American lone and married mothers were more likely to dissolve their first marriage through separation/divorce, thus lowering the odds in favour of lone mothers. Finally, with respect to the fertility demographic independent variable, lone mothers in the youngest age group were more likely than those currently married to have had less than three children, but with advancing age the probability approaches unity for the two parent types for both Canada and the United States, thus conforming with the cross-classification analysis.

The analysis of the social independent variables -- post-secondary education, labour force status and occupation -- produced estimates that were remarkably similar for Canada and the United States, although discrepancies did appear in the comparisons by occupation (the professional and managerial/administrative occupations in particular reveal estimates for Canadian lone mothers that exceed those for their American counterparts). The cross-classifications also revealed this pattern for the social variables.

The economic independent variables revealed marked differences between American lone mothers and lone fathers (comparable Canadian data were not collected). Lone mothers were considerably more likely than married mothers to appear in the lower income categories (<$20,000) but lone fathers were less likely to be in the lower categories compared to married fathers. In the absence of Canadian income data, the substitution of post-secondary education for income revealed that Canadian lone fathers were about as likely as married fathers to have attained some post-secondary, thus indicating that they fared more favourably on the education variable than did lone mothers compared to married mothers. In the American comparisons, the interaction effect of the 'number of income earners' emphasized the income differential, raising the ratio in favour of lone mothers with low incomes while lowering the ratio in favour of lone fathers with low incomes. This suggests that a larger proportion of lone fathers were employed in higher paying occupations compared, not only to lone mothers, but to married fathers as well. With respect to home ownership, both Canadian and American lone mothers were far less likely than married mothers to own their home. American lone and married fathers were about equally likely to do so. Canadian lone fathers were more likely than lone mothers to own their home, as revealed in the cross-classifications, but were remarkably less likely than married fathers to do so, as revealed in the logit model.

The current independent variables produced significant results at the .05 level in all tables with the exception of the income-related models. This could be attributed to the small size of the male lone-parent sample as well as the uneven distribution of income between male lone and married parents. Entropy and concentration revealed somewhat higher measures of association for the current models than for the antecedent models, which may be attributed to the fact that less dissaggregation of data was required in this portion of the analysis. While the antecedent independent variables produced consistent results, a higher proportion of dispersion in the dependent variable was explained by the models using the current independent variables.

Comparisons of Canada and the United States

This study revealed that the striking increase in female lone-parent families since the 1970s has produced a trend that is similar in Canada and the United States. It has been pointed out in previous chapters that the primary difference in the pattern between the two countries derives from the difference in the size of the lone parent population in each country. Several examples have been found in which the comparative characteristics show a similar pattern but the proportion of lone mothers revealed to manifest a particular characteristic is considerably greater for the United States than for Canada.

The antecedent characteristics, however, reveal not only a similar pattern for both Canada and the United States, but similar proportions of lone mothers in each country who exhibited the antecedent trait. The current characteristics, on the other hand, are those that female parents stated they possessed at the time of the survey, at which time some female parents would have experienced the transition to the lone mother state from one of its origins -- premarital childbearing, separation, divorce or widowhood. As the present study found divorce to be the primary cause of female lone parent families, and as divorce rates are considerably higher in the United States than in Canada, there is consequently a larger pool of divorced lone mothers in the United States. The higher proportion of American compared to Canadian lone mothers is revealed in the analysis of the current characteristics mainly with respect to the incidence of divorce and serial marriage, the attainment of post-secondary education, and the proportion currently working.

Historically, trends that are evident in the United States at one point in time appear in Canada at a later date. Further, the cultural gap between the two countries concerning such trends may then narrow over time. In the 1970s, when the rise in female lone parenthood began to capture public attention, the American divorce rate (3.5% per 1,000 population) was more than twice as high as the Canadian rate (1.4% per 1,000 population). By 1991, the differential between the American divorce rate (4.7%) and the Canadian (2.7%) had diminished considerably. The percent change in the number of divorces between 1971 and 1991 was 67.7% for the United States and 159.5% for Canada, revealing a distinct narrowing of the differences between the two nations regarding divorce. With divorce being the major source of female lone parents, it could be concluded that the differential between the two countries regarding the incidence of female lone parenthood is likely to diminish as well.

This study indicates that the rise in female lone-parent families has profound impact on the life experiences of the lone mother and it is beyond mere speculation to assume that these experiences would also impact her children, related family members, and society at large. The reciprocal influence between the family and other societal institutions, discussed in Chapter 1, has particular significance in the current period of economic recession and budgetary cutbacks in Canada and the United States. In the current environment, families are called upon to undertake more responsibilities in the raising of their children, including such areas as education, health and behaviour. This study indicates that lone mothers, on average, would find it difficult to undertake these growing responsibilities without social and economic support. It is significant, however, that female lone parenthood is not likely to be a life-time state, but rather a transitional stage of relatively short duration. This does not underestimate the needs of lone mothers, but rather increases the probability that types of social subsidies could be initiated considering the shorter duration of the critical period.

Comparisons with the Early 1990s

Canadian family data are generally obtained from special surveys or from the quinquennial censuses. Apart from a survey of Canadian children yet to be released, a systematic survey targeting the family has not been conducted since the 1984 Family History Survey, and the 1996 census data are not yet available. Studies in the early 1990s, therefore, are essentially based on the 1991 census. There have been some statistics published in the American literature since the 1985 Marital History Survey and the 1990 United States census.

In 1984, 12.8% of all Canadian families with children were headed by a lone mother; by 1991 the percentage increased to 16.4%. In 1985, 24.2% of all American families with children were headed by a women; the percentage increased to 25 % in 1990 and 26.6% in 1994.[1] Examining the derivatives of lone motherhood, divorce continues to be the greatest contributor in Canada, although the proportion divorced declined slightly from 33.8% to

33.0% in 1991. This reflects the slight but continuing decline in Canadian divorce rates.[2] The American statistics reveal a striking reversal by marital status. The growing proportion of never-married mothers reached 38.9% in 1994 and for the first time exceeded the proportion of American lone mothers divorced (35.9%). As in Canada, the American divorce rate has continued to decline and in 1994 held steady at 4.6 per 1,000, its lowest point in 20 years.[3]

Both the Canadian and American survey findings reveal that lone mothers were more likely than married mothers to be employed in the 1980s, probably because of a greater economic need. The reverse of this characteristic evolved in the 1991 Canada census -- lone mothers were less likely than those married to be employed. The reason for the reversal could be explained by the deep recession of the early 1990s which resulted in six years of double-digit unemployment, increasing child-poverty rates, and soaring welfare caseloads. The dependency on welfare became greater for lone-earner compared to two-earner families experiencing unemployment. On average, welfare payments in 1991 made up 30% of the income of lone-mother families compare to 7% of two-parent families.[4]

Overall, the circumstances of lone-mother families in the early 1990s have not changed significantly from what was found in the 1980s. Lone mothers remain less likely than other parent types to have attained post-secondary education (a university degree) or to own their home; they also remain concentrated, with women in general, in the "traditionally female" lower-paying occupations.[5] Sixty-one percent of Canadian lone mothers in 1991 and over half of American lone mothers in 1990 were living below the poverty line,[6] thus comprising one of the most disadvantaged groups in each country. Preliminary findings of the 1995 Canadian survey of children reveal that 1.4 million, or 21%, of Canada's children are living in poverty, and female lone-parent families constitute 41.4% of the poor. Furthermore, child poverty in

Canada is noted to be second only to the United States among the industrialized countries.[7] The findings from the two surveys under study provide a valuable data base for evaluating future changes in female lone-parent families and the concomitant needs in family policy-making.

Summary of the Findings

In accordance with the expectations for the study outlined in Chapter 4, the major findings of the analyses are summarized below.

Canadian and American lone mothers were more likely than married mothers to experience early marriage and early childbearing (before age 20). Of the two antecedents, early childbearing and the propensity for female lone parenthood reveal the stronger relationship. The logit model estimates indicate that American lone mothers were slightly more likely than their Canada counterparts to have experienced either antecedent event.

Canadian and American lone mothers who experienced an early marriage were less likely than married mothers to have attained some post-secondary education. With respect to first work experience, Canadian lone mothers were more likely than married mothers not to have started working until after an early marriage; American lone and married mothers were about equally likely not to have done so. These findings indicate the deterring effect of the early marriage antecedent on the intermediate variables, educational attainment and employment experience, although the effect on employment experience is less predictive in the American case.

Canadian and American lone mothers who experienced early childbearing were less likely than married mothers to have attained some post-secondary education. Lone mothers in both countries were also decidedly more likely not to have started working until after an early childbirth. The early childbirth antecedent reveals a stronger deterring effect on the intermediate variables, education and work experience, compared to the early marriage antecedent.

The lone-parent stage occurs at critical points in the family life-cycle when dependent infants/children are in need of care and young mothers are most in need of economic support. Never-married motherhood is most prevalent in the youngest age group (18-24 years) and separation/divorce occurs in the young to middle age groups (30-49 years). While the lone motherthood varies by cause of marital dissolution, the total duration of the lone-parent stage, on average, is about five years for both countries.

The marital histories reveal the most substantial differences between the two nations. The American data, compared to the Canadian, indicate higher proportions of: never-married mothers and fathers, separation and divorce, and two+ marriages.

For both nations, divorce is the primary cause of marital dissolution, and the highest proportion of these dissolutions occurred in the youngest to middle age groups. Lone mothers in both countries were more likely than those currently married to dissolve their first marriage through separation or divorce. In the American case, however, the likelihood of divorce is high for both lone and married mothers; therefore, the odds of experiencing just one marriage in favour of American lone mothers appear artificially low compared to the Canadian findings.

The average number of natural children, which is two children, is very similar for both lone and married mothers and for both countries. Lone mothers at older ages with completed families, however, had larger families than married mothers. The total number of children (adopted, step, and natural) is higher for lone mothers than lone fathers, reflecting the effects of remarriage and blended families, and the fact that the custody of children is granted to the mother in the majority of divorce actions.

Current educational attainment (at the time of the survey) substantiates the antecedent findings -- that early childbearing blocks education. For both countries, a larger proportion of married mothers than lone mothers had attained some post-secondary education. The percentages for American mothers (both lone and married) exceeds those for their Canadian counterparts.

For both countries, a larger proportion of lone than married mothers were currently employed, and previous periods of unemployment had been shorter for lone mothers, in both cases indicating a greater economic need to work on the part of lone mothers.

The distribution of female parents by occupation does not veer significantly from the historical pattern with both lone and married mothers clustered in the traditionally 'female' occupations. Canadian lone mothers at later ages made some gains in the professional occupations.

The comparisons by income clearly portray the economic circumstances of American female lone parents. (The Canadian survey did not collect income data.) The American findings reveal that the greatest differentials between lone and married mothers appear at each end of the income scale. The proportion of female parents with incomes:

<$10,000 -- is high for lone mothers (46.4%) and low for married mothers (8.7%),

$30,000+ -- is high for married mothers (50.7%) and low for lone mothers (11.7%),

$10,000-$20,000 -- contains the bulk of both lone and married mothers (41%), although the highest proportion of married mothers is at the top of this income category (21%) while the highest proportion of lone mothers is at the bottom (17%).

As lone mothers are sole-earns, introducing the 'number of income earners' as an interaction term increased the income differential between lone and married mothers. The logit model for income, including the number of earners as an interaction term, indicates that lone mothers were twelve times more likely than married mothers to have an income of less than $20,000.

Further, Canadian and American lone mothers were far less likely than those married to own their home. In contrast, lone fathers in both countries are revealed to be better off; they compare more favourably to married fathers with respect to income and home ownership. (Post-secondary education was substituted for income in the Canadian comparison.)

Implications for Family Policy

Family change, particularly evident in the growth of female lone-parent families, has created new needs and demands which call for corresponding changes in family policy. Social policies that affect families in Canada and the United States have historically been geared toward the traditional two-parent family -- the male-provider form based on female dependency. Such programmes and benefits virtually exclude the female lone parent. This section will review some of the federal policies as well as the personal income tax provisions that have been designed to serve families in each nation.

Canadian Policies

Before 1940, social security in Canada was considered a family responsibility, not the responsibility of the state. Public apathy toward the conditions of the poor stemmed from the existing view that poverty was related to personal characteristics and failings. This view point was later replaced by the notion that collective living in an industrialized society presents certain risks that should be shared by the entire society and protected by public programmes. With this change in the perception of poverty, the Unemployment Insurance Act came into effect in 1941, the Family Allowance programme in 1945, and the Old Age Security Act in 1952. Both view points regarding the provision of social assistance still prevail, however, and have been influential in the shaping of social policy. [8]

Eichler[9] has outlined some of the major Canadian policies. Families may receive assistance from federal or provincial transfers to individuals. "Unemployment Insurance" is a universal programme under federal legislation for all waged or salary earners. It provides income, based on previous earnings, in the case of job loss. The recipient must therefore have contributed through previous employment, which the younger lone mother may not yet have experienced. "Old Age Security" is also a universal programme providing taxable payments to all individuals aged 65 years or over. The "Guaranteed Income Supplement" is an income-tested supplement to Old Age Security based on family income; therefore, an equally needy single person may not claim this benefit. The "Canada/Quebec Pension Plan" is a compulsory plan which provides for a retirement pension based on employee/employer contributions. Female earnings are significantly lower than those of males, however, so there is a significant difference in the level of pensions received by each. In 1977 these plans were amended to allow for equal splitting between husband and wife of credits earned during marriage, providing either spouse applied within three years of divorce. Finally, "Social Welfare" is provided under provincial/municipal legislation, although the federal government also contributes. Family welfare benefits are available to mothers raising children alone providing the candidate is not a recipient of another benefit programme; also, the welfare payment is reduced depending on the amount earned should the mother be employed. Welfare is therefore said to be a disincentive to work. In sum, older lone mothers, who most likely would not have dependent children at home, may receive some relief from the Old Age Pension or from splitting the Canada/Quebec Pension after divorce but, apart from welfare, the policies that transfer income to individuals provide little benefit to younger lone mothers with dependent children.

Of the federal income tax deductions and credits based on marital status, the "spousal credit" allows a legally married tax filer to claim this credit if the annual income of his/her spouse (usually the wife) is less than a prescribed amount. The "transfer of spouse's unused credits" permits credits not used by one spouse to be claimed by the other spouse, thus reducing the amount of tax payable. As it is the male who generally earns the higher taxable income, both of these credits benefit the male-provider family type. The "equivalent-to-spousal credit" can be claimed by a single, separated, divorced or widowed person who supported a person (an adult or child related by blood, marriage or adoption) during the taxation year. Lone mothers may claim this credit, but only if they earn enough to pay tax. The "spouse's allowance" is not derived from taxation; it is an income-tested direct transfer in the form of a monthly payment to spouses (mainly wives) who are married to a pensioner in receipt of the Old Age Security Pension. Again, the male-provider family is generally the recipient of this benefit.

Turning to policies oriented toward children reveals the area where major change in social policy has occurred. The universal "Family Allowance" programme was initiated in 1945 and remained in place for nearly half a century. Legislation to replace the system was approved in Commons in 1992. In 1993, a new tax-free system, "the Child Tax Benefit", was implemented by rolling three existing child assistance programmes -- family allowance, the non-refundable child tax credit and the refundable child tax credit -- into one. The resulting Child Tax Benefit provides a standard benefit of $1,020 per year per child, plus additional amounts which vary depending on the number and age of children. The working poor also receive a Working-Income Supplement (WIS) up to a maximum of $500 a year (which will be doubled to $1,000 by 1998). WIS is reduced as income approaches the cut-off level (about $25,900 in Alberta, 1996). The standard benefit shrinks as family income rises, disappearing for a family earning $75,000 a year. The programme is aimed at giving more assistance to the working poor, although recipients may also qualify for the provincial social welfare benefit. Some condemned the programme saying it does little for the poorest families; others claimed that it marks the end of the principle of universality in Canada's social programmes.[10]

American Policies

Moen and Schorr [11] examine the interplay between public policies and families in the United States. They state that if one looks only at how government affects families, family policy almost disappears, for it is individuals, not families, that are the basic targets of government action. By focusing on families, however, we may differentiate policies that have family repercussions from those that affect individuals only.

Federal or state transfers that assist individuals and/or families include employment and income-support programmes. From 1935 to 1960, government policies reflected the pervasive philosophy "that it is a social obligation to provide for the maintenance of human beings, even when they are not productive."[12] Programmes were designed to protect the poor, and the payment formula was based on income. The so-called means-tested programmes grew in the 1950s and 1960s and by the 1970s became of overwhelming importance. It is through these programmes that the unemployment insurance and social security systems evolved.

"Unemployment insurance" is partly determined by family factors, such as the number of earners in the household and the number of dependents to be supported; consequently, it is not equally available to all families. One study (1975) found that lone mothers were the least likely to be protected by insurance.[13] "Social Security for the Aged" (enacted in 1935) provides universal income support to individuals or families; it is claimed to represent a landmark in American family policy. "Survivors' Insurance" (SI) is available to lone mothers who are widowed regardless of whether or not they are poor. All other categories of lone motherhood, however, are not eligible; if they are poor they are entitled to apply for welfare. The largest of the welfare programmes is the "Aid to Families with Dependent Children" (AFDC). Welfare (AFDC) benefits are much smaller than SI benefits, hence widowed females are better off than separated, divorced or never-married mothers. Furthermore, AFDC drastically reduces benefits as earnings increase, so the programme is faulted for discouraging work. Lone mothers are therefore caught in a poverty trap as AFDC does not provide sufficient income for a nonworking lone mother to live above the poverty line.

With respect to policies oriented toward children, the United States is the only industrialized country that does not have some form of child allowance. A "refundable child tax credit" which, in economic terms, is equivalent to a child allowance, has been proposed by the National Commission on Children (1991) -- a bi-partisan Commission appointed by President Reagon and the Congress.[14] The "earned income tax credit" (EITC), is the most well developed American policy designed to compensate for low earnings. While not directly oriented toward children, EITC is a refundable tax credit which provides a substantial income supplement to poor or nearly poor families. The benefits vary by number of children. EITC has three components: the earnings credit, a child-care credit, and a health insurance credit. Administered through the income tax system, EITC is considered attractive compared to AFDC because of its simplicity and anonymity, and because it promotes work. McLanahan and Garfinkel state "the popularity of EITC reflects the fact that most Americans now believe that single mothers should earn money to help support their families once their children are in school".[15] Another federal government subsidy for child care, the "dependent care tax credit", benefits middle to upper middle income families but does little or nothing for lone mothers who pay little or no tax. Finally, the "Family Support Act"(1988) provides child care support for lone mothers who are participating in work or training programmes, but only for a maximum of one year after leaving welfare.[16]

Future Directions

The development of family policy in Canada and the United States has, in the broad historical spectrum, followed a similar pattern. Before the 1940s -- the depression years, the prevailing climate in both countries was one of apathy toward the conditions of the poor. Families were expected to care for themselves. From the 1940s to the 1960s, mainly during the favourable economic climate of the post-World War II years, the public's perception of poverty turned around and the provision of assistance to those less fortunate was viewed as a social obligation. A profusion of federal policies and public assistance programmes followed. In Canada, these programmes were mainly universal in nature and noted to be the underpinnings of a federal welfare state; in the United States they were generally means-tested programmes targeted on particular groups in need. Social security became an important concern and the growth of programmes continued in the 1970s.

The next stage in the evolution (or devolution) of family policy began in the 1980s and continued into the early 1990s – a period of economic recession and budgetary cutbacks. As noted in Chapter 1, in such recessionary periods families are expected to undertake more responsibility for themselves, and family policy must find new and less economically burdensome directions. Some possible directions and their implications for female lone-parent families are outlined below.

1. The provision of universal social programmes, with the enormous economic burden it carries, is diminishing as a social policy option. Perhaps the only advantage gained in using such programmes is that the degrading effect of means-testing is eliminated. Emphasis is now focused on providing benefits administered through the income tax system. This procedure is more simplistic, it protects anonymity and families that receive benefits are not stigmatized. The argument here is that some families, female lone-parent families in particular, may earn little or no taxable income so would receive little or no benefit.
2. The current welfare policies in Canada and the United States have been subject to ever-lasting criticism, particularly in the United States. These programmes are said to be a detriment to both the individual and the state – lowering the self esteem of the individual and creating dependency on the state. Welfare policy could be directed more profitably by creating job training and/or educational programmes, thus enabling recipients to become more self-sufficient and productive.
3. Employment would be more available to lone mothers through innovative work place policies including flexible working hours, compressed work weeks, part-time work, job sharing and parental leave.

4. Child care provisions/subsidies are an essential aspect of lone mothers' participation in the work force. Proposals for a national daycare system in Canada have been deferred due to budgetary cutbacks. In the interim, the work environment could be made more "family-friendly" with some innovative policies regarding "on the job child care."

5. Considering policies related to child support, lone mothers' low earning capacity and economic insecurity can be improved by strengthening fathers' support obligations. Both Canada and the United States have taken great strides toward the standardization and enforcement of child support awards. The Canadian government has proposed a Child Support Package which introduces Child Support Guidelines in the Divorce Act. The federal guidelines are designed to establish fair and consistent child support awards which consider both parents and individual family circumstances. This style of guideline is used in many American states. The enforcement of maintenance awards is a provincial responsibility, although the federal government will contribute funding under the new plan. The new Package is to take effect in May, 1997, but will not be mandatory for support awards negotiated out-of-court.[17]

6. Public concern in Canada, especially that of lone mothers, has brought about a proposed change in Canada's Income Tax Act. For the past fifty years, the parent receiving child support (usually the mother) has been required to pay income tax on it, and the support-paying parent (usually the father) has been able to claim a tax deduction for the payments. With the new tax rules, child support will no longer be taxed as income to the recipient, nor will it be tax deductible for the payer.[18] The gain to the lone mother is somewhat superficial, however, in that support payments to the custodial parent will now be less (minus the amount of the tax), as the custodial parent's tax obligation has

normally been accounted for in previous custody settlements under the existing rules. The new direction in legal policy will commence, in tandem with the federal Child Support Guidelines, in May, 1997.

7. Family policy can be strengthened considerably by implementing policies oriented toward children. Children raised in disadvantaged families will have a significant social and economic impact on the well-being of society in the future. Protecting children from poverty is a primary goal in family policy making, and one that is rarely disputed by the general public. The Canadian federal government is proposing a new National Child Tax Benefit which is claimed to be "richer" than the child tax benefit currently in place.

8. Policies targeted on particular systems, such as health, education and housing, could be beneficial to lone mothers. In Canada, health and education are universal systems which are more or less freely available. In the United States, lone mothers who are on welfare are covered by Medicaid, which is income-tested.

9. Female lone parenthood takes three forms which vary by origin and age -- the never-married are prevalent in the youngest age group, the separated/divorced in the young to middle age groups, and the widowed in the older age groups. Each form of lone motherhood bears differing needs which require different policy considerations. Enlightened policy making would be a sensitivity to the transitions the family encounters as it moves from one stage of the family life cycle to another[19], and preventive policy making would be an awareness of the differing stages and needs and the particular population at risk.

Directions for Further Research

The findings revealed in this study suggest other areas of research that warrant investigation. Some important implications that relate to female lone parenthood are discussed in the following points.

The present findings could be expanded by exploring other female lone-parent characteristics not included in the data sources used. Health and housing are notable examples which, in a previous British study, were revealed to have negative implications for lone mothers. The examination of characteristics with respect to religion and ethnicity would also advance the current knowledge regarding female lone-parent families.

Future analyses would benefit from longitudinal data (panel-study analysis) which would follow females through the stages and transitions of the family-life cycle. The advantage gained from this method is that all females would complete the entire sequence of events, those that determine and result from female lone parenthood, thus facilitating both the analysis and interpretation. Longitudinal data, however, are rarely collected. Life-table techniques offer another useful method; for example, increment-decrement models could be designed to estimate the probability of becoming a lone parent.

From the historical point of view, it would be of value to ascertain whether the female lone-parent characteristics apparent in the present study of Canada and the United States were anomalous to the 1980s or whether a similar pattern persists in the 1990s. Considering the higher age at first marriage, for example, do early marriage and early childbearing continue to be important determinants of female lone parenthood? Also, with divorce and remarriage rates remaining high, has this decreased the duration of the lone-parent state but at the same time increased the effects of broken and blended families on the dependent children of these families.

A major concern regarding female lone-parent families focuses on the dependent children involved. A study of these children compared to the children of intact two-parent families would elucidate the differing effects by parent type.

While lone fathers comprise a small minority of custodial parents, it may be enlightening to examine their circumstances as access parents. Lone fathers who do not fulfill maintenance obligations may be subject to court action and may also be denied access to their children by the custodial mother. Inquiries could investigate the success rate of access settlements and whether maintenance settlements imposed on lone fathers are generally reasonable and in accordance with their respective incomes.

It would be informative to investigate the availability of social policy initiatives through which lone mothers may seek economic assistance, considering policies implemented by both the provincial/state and federal levels of government.

Data permitting, it could prove useful to expand the comparative analysis of female lone-parent characteristics between Canada and the United States to include other westernized countries. The broader scope of cultural similarities and differences would provide a more comprehensive data base upon which to assess past and current trends.

Future research would benefit from, first, targeting the population at risk of experiencing female lone parenthood and, second, expanding the relative variables in areas such as religion, ethnicity, health, housing and income. Enhanced data collection could be pursued through questions asked in special studies such as the Canadian and American General Social Survey as well as in the census of each country.

Notes

[1] Statistics Canada, Lone-Parent Families in Canada, Catalogue 89-522E (Ottawa: Minister of Industry, Science and Technology, 1992), 15; The Universal Almanac 1997, ed. John W. Wright (Kansas City: Andrews and McMeel, A Universal Press Syndicate Co., 1996), 310; McLanahan Sara and Irwin Garfinkel, "Single Motherhood in the United States: Growth, Problems, and Policies," in Joe Hudson and Burt Galaway, eds. Single-Parent Families: Perspectives on Research and Policy (Toronto: Thompson Educational Publishing, Inc., 1993), 15.

[2] Statistics Canada, 10-11.

[3] The Universal Almanac 1997, 306, 311.

[4] Statistics Canada, 37.

[5] Statistics Canada, 24-25.

[6] Statistics Canada, 35; Abdul Rashid, "Family Income in Canada," Statistics Canada, Focus on Canada Series, Catalogue 96-318E (Ottawa: Minister of Industry, Science and Technology, 1994), 13; McLanahan and Garfinkel, 15.

[7] Jenkinson, Michael, "And Then Came the Children's Crusade," Alberta Report (January 27, 1997), 6-9; April Lindgren, "Child Poverty Pinned on Jobs, Pay Levels," Edmonton Journal (January 19,1997), A8.

[8] Eichler, Margrit, Families In Canada Today: Recent Changes and Their Policy Consequences (Toronto: Gage Publishing Limited, 1983), 306-34.

[9] Eichler, 306-17.

[10] Jenkinson, Michael, "And Then Came the Children's Crusade," Alberta Report (January 27, 1997), 7-9; Government of Canada, The New Child Support Package (Department of Supply and Services, Canada Communication Group-Publishing, March 6, 1996), 25-27.

[11] Moen, Phyllis and Alvin L. Schorr, "Families and Social Policy," in Marvin B. Sussman and Suzanne L. Steinmetz, eds. Handbook of Marriage and the Family, 795.

[12] Moen and Schorr, 802.

[13] Moen and Schorr, 802.

[14] McLanahan and Garfinkel, 24.

[15] McLanahan and Garfinkel, 24.

[16] McLanahan and Garfinkel, 15-29.

[17] Government of Canada, 11-17.

[18] Government of Canada, 7-10.

[19] Moen and Schorr, 810.

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APPENDIX TABLES

SYMBOLS

The following symbols are used in the Appendix Tables:

- nil or zero

-- amount too small to be expressed

* figures not appropriate or not applicable

Table 1
Percentage of Female Lone and Married Parents by Current Marital Status and Age Group, Canada, 1984
(000's)

	Lone Parents						Married
Current Age Group	Sing[1] %	Sep[2] %	Div[3] %	Wid[4] %	Total No.	Total %	Parents %
18-24	70.3	18.9	--	-	66	100	7.0
25-29	34.8	29.0	34.8	--	79	100	16.6
30-34	21.1	39.5	34.2	--	89	100	20.0
35-39	11.3	25.0	51.2	12.5	85	100	19.5
40-44	--	33.3	33.3	24.6	69	100	14.0
45-49	--	19.1	46.8	27.3	64	100	10.3
50-54	--	--	13.9	66.7	38	100	7.8
55-65	--	--	--	58.8	37	100	4.8
Ages 18-65							
Total No.	107	152	178	89	527		3,584
Total %	20.3	29.0	33.8	16.9	100	100	100

[1] Single (never married); [2] Separated; [3] Divorced; [4] Widowed

Source: See Table 33.

Table 2
Percentage of Female Lone and Married Parents by Current Marital Status and Age Group, United States, 1985
(000's)

Current Age Group	Sing[1] %	Sep[2] %	Lone Parents Div[3] %	Wid[4] %	Total No.	Total %	Married Parents %
18-24	69.4	17.8	12.1	- -	1,285	100	7.5
25-29	43.7	23.2	31.0	2.1	1,247	100	15.7
30-34	26.2	23.6	47.0	3.2	1,274	100	19.9
35-39	14.0	19.4	58.1	8.5	1,304	100	20.3
40-44	8.8	18.3	59.9	13.0	901	100	14.8
45-49	7.7	18.5	49.7	24.1	646	100	10.3
50-54	8.0	14.1	38.2	39.7	450	100	6.6
55-65	- -	12.3	29.6	55.9	404	100	4.9
Ages 18-65							
Total No.	2,128	1,468	3,050	865	7,511		23,426
Total %	28.3	19.5	40.6	11.5	100	100	100

[1] Single (never married); [2] Separated; [3] Divorced; [4] Widowed

Source: See Table 33.

Table 3
Percentage of Male Lone and Married Parents by Current Marital Status and Broad Age Group, Canada, 1984
(000's)

			Lone Parents				Married
Current Age Group	Sing[1] %	Sep[2] %	Div[3] %	Wid[4] %	Total No.	Total %	Parents %
18-29	63.6	- -	- -	-	15	100	16.3
30-39	20.0	35.6	40.0	- -	61	100	38.6
40-49	- -	33.3	29.6	- -	40	100	26.6
50-65	- -	- -	34.4	34.4	40	100	18.5
Ages 18-65							
Total No.	36	43	48	29	156		3,716
Total %	23.1	27.5	30.8	18.6	100	100	100

[1]Single (never married); [2]Separated; [3]Divorced; [4]Widowed

Source: See Table 33.

Table 4
Percentage of Male Lone and Married Parents by Current Marital Status and Broad Age Group, United States, 1985
(000's)

	Lone Parents						
Current Age Group	Sing[1] %	Sep[2] %	Div[3] %	Wid[4] %	Total No.	Total %	Married Parents %
18-29	87.1	3.3	4.7	- -	119	100	17.6
30-39	23.7	21.9	50.9	- -	383	100	43.7
40-49	9.2	24.1	61.0	- -	283	100	28.5
50-65	- -	16.0	52.0	28.0	105	100	10.2
Ages 18-65							
Total No.	240	198	387	65	890		24,143
Total %	27.0	22.2	43.5	7.3	100	100	100

[1] Single (never married); [2] Separated; [3] Divorced; [4] Widowed

Source: See Table 33.

Table 5
Ever-Married Female Lone and Married Parents Married Before Ages 20 and 25 Years, by Age Group, Canada, 1984 and United States, 1985
(000's)

Current Age Group	Canada Lone Parents %	Canada Married Parents %	United States Lone Parents %	United States Married Parents %
Before Age 20				
20-24	75.0	59.8	62.8	48.7
25-29	46.7	36.8	36.2	28.7
30-34	48.3	31.3	38.6	27.9
35-39	32.4	29.4	33.0	25.3
40-49	22.9	31.2	31.3	25.6
50-65	19.4	16.4	19.9	19.7
Ages 20-65				
Total No.	420	3,584	4,407	20,853
Total %	34.5	31.7	33.7	27.6
Before Age 25 (cumulative percentage)				
20-24	100.0	100.0	100.0	99.5
25-29	100.0	92.9	94.4	89.1
30-34	96.6	85.0	88.3	81.2
35-39	87.3	84.9	83.6	83.7
40-49	81.3	82.1	84.4	81.5
50-65	79.0	66.6	64.6	70.1
Ages 20-65				
Total No.	420	3,584	4,407	20,853
Total %	88.2	84.2	83.9	82.8

Source: See Table 33.

Table 6
Percentage of Female Lone and Married Parents Having a First Birth Before Age 20, by Age Group, Canada, 1984 and United States, 1985
(000's)

Current Age Group	Canada Lone Parents %	Canada Married Parents %	United States Lone Parents %	United States Married Parents %
20-24	65.5	37.0	50.0	36.5
25-29	22.4	21.0	27.7	17.6
30-34	19.0	16.0	29.4	15.0
35-39	18.8	15.7	22.4	14.0
40-49	10.9	13.1	20.2	13.5
50-65	12.8	5.4	12.5	8.0
Ages 20-65				
Total No.	527	3,584	4,703	22,011
Total %	25.6	18.6	23.8	15.4

Source: See Table 33.

Table 7
Percentage of Female Lone and Married Parents Having a First Birth During or Before the First Year of First Marriage, by Age Group, Canada, 1994 and United States, 1995
(000's)

	Canada		United States	
Current Age Group	Lone Parents %	Married Parents %	Lone Parents %	Married Parents %
18-24	46.0	32.0	46.2	39.5
25-29	37.0	19.0	39.5	24.3
30-34	28.3	19.4	36.1	19.1
35-39	25.4	17.7	30.1	16.9
40-44	21.2	18.1	27.9	17.1
45-49	- -	12.0	21.2	16.2
50-54	- -	11.0	19.3	10.8
55-65	- -	12.0	20.8	12.8
Ages 18-65				
Total No.	420	3,584	5,317	23,529
Total %	25.0	18.1	30.7	19.6

Source: See Table 33.

Table 8
Percentage of Female Lone and Married Parents with Some Post-Secondary Education, by Age at First Birth and Current Age Group, Canada, 1984 and United States, 1985
(000's)

Current Age Group	Age at First Birth							
	Canada				United States			
	>20 Years %	20-24 Years %	25+ Years %	Total	>20 Years %	20-24 Years %	25+ Years %	Total
Lone Parents								
20-29	17.0	64.7	18.3	100	21.3	63.8	14.9	100
30-39	12.3	46.9	40.8	100	12.6	52.9	34.5	100
40-49	10.5	52.6	36.8	100	8.2	56.3	35.5	100
50-65	7.1	28.6	64.0	100	- -	38.0	54.3	100
Ages 20-65								
Total No	17	62	48	127	253	1,079	646	1,978
Total %	13.4	48.8	37.8	100	12.8	54.6	32.6	100
Married Parents								
20-29	6.0	49.8	44.2	100	9.5	54.3	36.2	100
30-39	5.0	37.3	57.7	100	5.9	34.6	59.5	100
40-49	5.1	43.0	51.9	100	4.7	45.6	49.7	100
50-65	- -	30.9	64.9	100	- -	39.0	59.1	100
Ages 20-65								
Total No.	57	443	594	1,094	508	3,562	4,559	8,629
Total %	5.2	40.5	54.3	100	5.9	41.3	52.8	100

Source: See Table 33.

Table 9
Percentage of Female Lone and Married Parents Who Had a First Birth Before they Started Working, by Age Group, Canada, 1984 and United States, 1985
(000's)

Current Age Group	Canada		United States	
	Lone Parents %	Married Parents %	Lone Parents %	Married Parents %
18-24	22.2	14.6	20.2	15.4
25-29	20.3	14.2	23.2	14.7
30-34	30.9	16.4	26.1	15.0
35-39	32.8	17.5	35.3	17.6
40-49	25.5	22.4	39.5	17.7
50-65	29.8	18.6	47.2	18.4
Ages 18-65				
Total No.	437	3,153	6,894	23,344
Total %	27.0	16.7	28.3	17.3

Source: See Table 33.

Table 10
Percentage of Female Lone and Married Parents with Some Post-Secondary Education, by Age at First Marriage and Current Age Group, Canada, 1984 and United States, 1985
(000's)

	Age at First Marriage							
	Canada				United States			
Current Age Group	<20 Years %	20-24 Years %	25+ Years %	Total	<20 Years %	20-24 Years %	25+ Years %	Total
Lone Parents								
20-29	40.0	60.0	-	100	24.3	65.5	10.2	100
30-39	25.0	60.0	15.0	100	26.5	59.0	14.5	100
40-49	5.3	70.6	24.1	100	21.8	59.7	18.4	100
50-65	5.6	83.1	11.2	100	12.0	56.0	32.0	100
Ages 20-65								
Total No	17	63	22	102	363	892	276	1,531
Total %	16.6	61.8	21.6	100	23.7	58.3	18.0	100
Married Parents								
20-29	15.5	75.1	9.4	100	18.1	70.3	11.6	100
30-39	11.8	66.1	22.1	100	15.6	62.7	21.7	100
40-49	12.9	64.7	22.4	100	14.0	60.8	25.2	100
50-65	- -	57.7	34.6	100	14.0	52.1	33.8	100
Ages 20-65								
Total No.	116	644	314	1,074	1,324	5,333	1,857	8,514
Total %	10.9	59.9	29.2	100	15.5	62.6	21.8	100

Source: See Table 33.

Table 11
Percentage of Female Lone and Married Parents Having a First Marriage Before First Employment, by Age Group
Canada, 1984 and United States, 1985
(000's)

Current Age Group	Canada		United States	
	Lone Parents %	Married Parents %	Lone Parents %	Married Parents %
18-24	- -	22.3	11.1	7.2
25-29	20.3	21.6	20.3	16.6
30-34	28.2	21.4	21.3	20.3
35-39	29.9	21.5	17.5	19.5
40-49	24.4	24.4	19.3	21.1
50-65	34.0	20.4	20.5	15.2
Ages 18-65				
Total No.	106	675	879	8,785
Total %	23.6	21.9	18.0	17.1

Source: See Table 33.

Table 12
Percentage of Female Lone and Married Parents by Number of Marriages and Broad Age Group, Canada, 1984 and United States, 1985
(000's)

	Number of Marriages							
	Canada				United States			
Current Age Group	None %	One %	Two+ %	Total	None %	One %	Two+ %	Total
Lone Parents								
18-29	46.0	52.2	1.8	100	56.6	38.4	5.0	100
30-49	10.9	82.4	6.7	100	14.8	66.9	18.3	100
50-65	8.9	86.4	4.7	100	5.3	75.4	19.3	100
Ages 18-65								
Total No.	107	393	26	526	2,090	4,373	1,048	7,511
Total %	20.3	74.7	5.0	100	27.8	58.2	13.9	100
Married Parents								
18-29	-	96.5	3.5	100	-	90.2	9.8	100
30-49	-	93.6	6.4	100	-	82.5	17.5	100
50-65	-	95.8	4.2	100	-	87.4	12.6	100
Ages 18-65								
Total No.	-	3,387	197	3,584	-	19,883	3,542	23,425
Total %		94.5	5.5	100		84.9	15.1	100

Source: See Table 33.

Table 13
Percentage of Male Lone Parents by Number of Marriages and Broad Age Group, Canada, 1984 and United States, 1985
(000's)

	Number of Marriages							
	Canada				United States			
Current Age Group	None %	One %	Two+ %	Total	None %	One %	Two+ %	Total
Lone Parents								
18-29	63.6	36.4	-	100	88.4	7.6	--	100
30-49	18.1	81.5	- -	100	15.4	64.8	19.8	100
50-65	15.6	75.0	9.4	100	4.0	68.0	28.0	100
Ages 18-65								
Total No.	36	114	6	156	240	461	188	889
Total %	23.0	73.2	3.8	100	27.0	51.9	21.1	100

Source: See Table 33.

Table 14
Percentage of Female Lone and Married Parents by Dissolution of First and Second Marriage and Age Group, Canada, 1984 and United States, 1985
(000's)

	Canada				United States			
	First Age		Second Marriage		First Marriage		Second Marriage	
Current Age Group	Sep[1]/Div[2] %	Wid[3] %	Sep[1]/Div[2] %	Wid[3] %	Div[2] %	Wid[3] %	Div[2] %	Wid[3] %
Loan Parents								
18-24	100.0	-	-	-	100.0	-	-	-
25-29	97.8	-	100.0		97.6	- -	- -	-
30-39	87.8	12.2	81.8	- -	95.8	- -	96.2	- -
40-49	72.9	27.1	83.3	- -	94.9	- -	96.6	- -
50-65	30.6	69.4	- -	- -	72.6	27.4	84.6	- -
Total No.	328	91	19	- -	942	81	153	- -
Total %	78.2	21.8	72.6	27.4	92.1	7.9	94.4	- -
Married Parents								
18-24	- -	-	-	-	96.1	- -	-	-
25-29	90.7	- -	-	-	96.8	- -	100.0	-
30-39	91.7	8.3	- -	-	95.4	4.6	95.0	- -
40-49	87.9	12.1	- -	-	88.4	11.6	92.2	- -
50-65	69.2	30.8	- -	- -	74.8	25.2	83.3	- -
Total No.	288	34	- -	- -	3,273	293	366	- -
Total %	89.4	10.6	- -	- -	91.8	8.2	93.1	- -

[1]Separation, [2]Divorce, [3]Widowhood

Source: See Table 33.

Table 15
Percentage of Male Lone Parents by Dissolution of First Marriage and Age Group, Canada, 1984 and United States, 1985
(000's)

Current Age Group	Canada First Marriage Sep^1/Div^2 %	Canada First Marriage Wid^3 %	United States First Marriage Div^2 %	United States First Marriage Wid^3 %
25-29	100.0	-	100.0	-
30-39	98.8	- -	97.4	- -
40-49	93.4	- -	96.2	- -
50-65	62.2	37.8	100.0	-
Ages 18-65				
Total No.	90	- -	188	-
Total %	90.6	9.4	97.5	2.5

^{1}Separation, ^{2}Divorce, ^{3}Widowhood
Note: Values for second marriages were too small to be expressed.

Source: See Table 33.

Table 16
Average Duration of Female Lone-Parent Experiences by Single, Separated, Divorced and Widowed Lone-Parent Status Canada, 1984 and United States, 1985

Type of Lone Parenthood Experience	Average Number of Years in the Lone Parent State Canada					United States				
	Sing[1]	Sep[2]	Div[3]	Wid[4]	Total	Sing[1]	Sep[2]	Div[3]	Wid[4]	Total
Prior to 1st Marriage	4.6					4.2				
Never Married to Survey Date	8.6					7.8				
After 1st Marriage to 2nd Marriage			3.3					3.6		
After 1st Marriage to Survey Date		3.1	5.4	7.2			3.7	5.6	6.6	
After 2nd Marriage to Survey Date		2.8	3.6				1.7	4.5		
Total on Average	6.6	3.0	4.1	7.2	5.2	6.0	2.7	4.6	6.6	5.0

[1]Single, [2]Separated, [3]Divorced, [4]Widowed

Source: See Table 33.

Table 17
Female Lone and Married Parents by the Average Number of Children Ever Born and Age Group, Canada, 1984 and United States, 1985
(000's)

	Canada		United States	
Current Age Group	Lone Parents	Married Parents	Lone Parents	Married Parents
18-24	1.2	1.4	1.6	1.5
25-29	1.5	1.8	2.0	1.9
30-34	2.0	2.2	2.1	2.2
35-39	2.3	2.4	2.4	2.4
40-44	2.7	2.9	3.0	2.8
45-49	3.1	3.6	3.6	3.4
50-54	4.0	3.9	3.9	3.8
55-65	4.2	4.0	4.5	4.1
Ages 18-65				
Number	527	3,584	5,318	23,529
Average	2.4	2.6	2.7	2.5

Source: See Table 33.

Table 18

Male and Female Lone Parents by Total Number of Children* and Age Group, Canada, 1984 and United States, 1985

(000's)

Current Age Group	Canada Lone Parents		United States Lone Parents	
	Male	Female	Male	Female
18-24	- -	1.3	1.6	2.1
25-29	- -	1.5	1.6	2.5
30-34	1.6	2.0	1.7	2.7
35-39	2.1	2.4	1.8	2.5
40-44	2.3	2.8	1.3	2.2
45-49	3.5	3.3	1.5	1.7
50-54	3.4	4.1	1.8	1.5
55-65	3.5	4.7	1.1	1.2
Ages 18-65				
Number	156	527	890	5,318
Average	2.4	2.5	1.6	2.2

*Note: For Canada, total children (natural, adopted, step) refers to all children ever raised; for the United States it refers to total children still at home.

Source: See Table 33.

Table 19
Percentage of Female Lone and Married Parents by Elementary and Secondary Education and Age Group, Canada, 1984 and United States, 1985
(000's)

	Canada			United States		
Current Age Group	Elementary %	Secondary %	Total %	Elementary %	Secondary %	Total %
Lone Parents						
18-24	- -	89.2	100	3.2	82.8	86.0
25-29	- -	94.2	100	5.1	68.1	73.2
30-39	14.7	85.3	100	5.1	61.1	66.2
40-49	22.1	77.9	100	10.1	55.2	65.3
50-65	47.1	52.9	100	18.8	56.6	75.4
Ages 18-65						
Total No.	97	430	527	548	4,829	7,511
Total %	18.4	81.6	100	7.3	64.3	71.6
Married Parents						
18-24	10.2	89.8	100	5.7	75.6	81.3
25-29	6.9	93.1	100	4.2	60.2	64.4
30-39	11.8	88.2	100	3.9	51.0	54.9
40-49	21.8	78.2	100	5.4	58.5	63.9
50-65	31.8	68.2	100	9.6	60.2	69.8
Ages 18-65						
Total No.	564	3,020	3,584	1,195	13,423	23,425
Total %	15.7	84.3	100	5.1	57.3	62.4

Note: The Canadian survey collected elementary/secondary and post-secondary data in two separate questions asked of the total population; the United States collected highest level of education from the total population in one question. The results in Table 17 are, therefore, not directly comparable.

Source: See Table 33.

Table 20
Percentage of Female Lone and Married Parents by Post-Secondary Education and Age Group, Canada, 1984 and United States, 1985
(000's)

Current Age Group	Canada None	 Some/ Completed	 Total	United States None	 Some/ Completed	 Total
	%	%	%	%	%	%
Lone Parents						
18-24	90.5	- -	100	85.9	14.1	100
25-29	73.9	26.1	100	73.2	26.8	100
30-39	67.3	32.7	100	66.2	33.8	100
40-49	81.7	18.3	100	65.3	34.7	100
50-65	78.6	21.4	100	75.4	24.6	100
Ages 18-65						
Total No.	404	123	527	5,378	2,133	7,511
Total %	76.7	23.3	100	71.6	28.4	100
Married Parents						
18-24	84.8	15.2	100	81.4	18.6	100
25-29	68.0	32.0	100	64.4	35.6	100
30-39	61.6	38.4	100	55.0	45.0	100
40-49	74.4	25.6	100	63.9	36.1	100
50-65	78.6	21.4	100	69.8	30.2	100
Ages 18-65						
Total No.	2,491	1,093	3,584	14,617	8,808	23,425
Total %	69.5	30.5	100	62.4	37.6	100

Source: See Table 33.

Table 21
Percentage of Female Lone and Married Parents by Employment Status and Age Group, Canada, 1984
(000's)

Current Age Group	Employed %	Unemployed %	Not in Labour Force %	Total %
Lone Parents				
18-24	33.8	14.9	51.3	100
25-29	50.7	13.1	36.2	100
30-39	60.9	7.7	31.4	100
40-49	65.4	4.8	29.8	100
50-65	38.6	5.7	55.7	100
Ages 18-65				
Total No.	279	47	200	526
Total %	53.1	8.9	38.0	100
Married Parents				
18-24	28.3	9.0	62.7	100
25-29	44.9	6.9	48.2	100
30-39	53.5	6.9	39.6	100
40-49	56.1	4.0	39.9	100
50-65	37.3	3.2	59.5	100
Ages 18-65				
Total No.	1,818	218	1,547	3,583
Total %	50.7	6.1	43.2	100

Source: See Table 33.

Table 22
Percentage of Female Lone and Married Parents by Employment Status and Age Group, United States, 1985
(000's)

Current Age Group	Employed %	Unemployed %	Not in Labour Force %	Total %
Lone Parents				
18-24	42.0	9.4	48.6	100
25-29	46.0	10.0	44.0	100
30-39	64.7	7.5	27.8	100
40-49	69.4	6.2	24.4	100
50-65	62.2	3.3	34.5	100
Ages 18-65				
Total No.	1,185	152	682	2,019
Total %	58.7	7.5	33.8	100
Married Parents				
18-24	43.9	7.3	48.8	100
25-29	48.9	4.7	46.4	100
30-39	56.4	3.3	40.3	100
40-49	62.3	2.9	34.8	100
50-65	48.7	1.9	49.4	100
Ages 18-65				
Total No.	4,501	287	3,411	8,199
Total %	54.9	3.5	41.6	100

Source: See Table 33.

Table 23

Percentage of Unemployed Female Lone and Married Parents by Reason for Unemployment and Age Group, Canada, 1984 (000's)

	Reason for Unemployment				
Current Age Group	Personal/ Family %	Slack Work/ Laid Off %	Health %	In School Retired/Other %	Total %
Loan Parents					
18-24	42.5	40.0	- -	- -	100
25-29	38.5	42.3	- -	- -	100
30-39	13.8	65.5	- -	- -	100
40-49	- -	50.0	- -	- -	100
50-65	- -	70.6	- -	- -	100
Ages 18-65					
Total No.	36	69	- -	- -	134
Total %	27.0	51.6	- -	- -	100
Married Parents					
18-24	39.2	40.0	- -	17.7	100
25-29	39.2	37.3	9.1	14.4	100
30-39	26.7	55.4	3.7	14.2	100
40-49	12.3	63.2	14.0	10.5	100
50-65	15.4	53.8	18.5	12.3	100
Ages 18-65					
Total No.	236	400	62	113	811
Total %	29.1	49.3	7.7	13.9	100

Source: See Table 33.

Table 24
Percentage of Unemployed Female Lone and Married Parents by Reason for Unemployment and Age Group, United States, 1985
(000's)

Current Age Group	Reason for Unemployment Personal/ Family %	Slack Work/ Laid Off %	Health %	In School Retired/Other %	Total %
Loan Parents					
18-24	63.3	- -	- -	- -	100
25-29	55.2	27.6	- -	- -	100
30-39	37.9	27.6	- -	27.5	100
40-49	- -	- -	- -	- -	100
50-65	- -	- -	- -	- -	100
Ages 18-65					
Total No.	115	59	- -	- -	241
Total %	47.7	24.5	- -	- -	100
Married Parents					
18-24	65.6	- -	- -	18.0	100
25-29	80.8	13.5	- -	- -	100
30-39	58.8	15.8	7.8	17.6	100
40-49	31.6	25.3	13.6	29.5	100
50-65	26.2	23.8	23.8	26.2	100
Ages 18-65					
Total No.	598	188	92	188	1,066
Total %	56.1	17.6	8.6	17.6	100

Source: See Table 33.

Table 25
Percentage of Unemployed Female Lone and Married Parents by Duration of Unemployment Since Last Job and Age Group, Canada, 1984
(000's)

Current Age Group	Duration of Unemployment <1 year %	1 - <2 years %	2 - 5 years %	6+ years %	Total	Average No. of Years
Lone Parents						
18-24	35.6	22.2	33.3	- -	100	2.1
25-29	35.3	- -	29.4	- -	100	2.1
30-39	28.8	- -	- -	44.2	100	3.6
40-49	- -	- -	- -	48.3	100	6.5
50-65	- -	- -	- -	50.0	100	8.4
Ages 18-65						
Total No.	65	29	52	75	221	
Total %	29.4	12.9	23.7	34.0	100	
Average						4.9
Married Parents						
18-24	48.3	17.2	27.6	6.9	100	1.8
25-29	27.3	13.9	30.1	28.7	100	2.3
30-39	26.7	6.7	18.9	47.7	100	4.3
40-49	23.4	5.1	10.4	61.1	100	7.7
50-65	16.1	4.5	12.6	66.8	100	10.8
Ages 18-65						
Total No.	423	133	304	725	1,585	
Total %	26.7	8.4	19.2	45.7	100	
Average						5.7

Source: See Table 33.

Table 26

Percentage of Unemployed Female Lone and Married Parents by Duration of Unemployment Since Last Job and Age Group, United States, 1985

(000's)

	Duration of Unemployment					
Current Age Group	< 1 year %	1 - < 2 years %	2 - 5 years %	6+ years %	Total	Average No. of Years
Lone Parents						
18-24	32.5	22.5	17.5	27.5	100	3.0
25-29	18.5	- -	18.5	46.3	100	3.1
30-39	14.5	- -	14.5	60.9	100	4.5
40-49	- -	- -	- -	73.3	100	4.7
50-65	- -	- -	--	64.5	100	* *
Ages 18-65						
Total No.	104	59	72	271	506	
Total %	20.5	11.7	14.2	53.6	100	
Average						4.2
Married Parents						
18-24	30.1	21.9	31.5	16.5	100	2.7
25-29	29.6	17.1	20.4	32.9	100	3.4
30-39	17.6	8.5	17.1	56.8	100	4.6
40-49	22.4	6.8	13.7	57.1	100	4.9
50-65	12.2	- -	13.7	68.7	100	* *
Ages 18-65						
Total No.	452	219	379	1,123	2,173	
Total %	20.8	10.1	17.5	51.6	100	
Average						4.8

Source: See Table 33.

Table 27
Percentage of Employed Female Lone and Married Parents by Occupation and Age Group, Canada, 1984
(000's)

Occupation	Current Age Group							
	Lone Parent				Married Parent			
	18-29 %	30-49 %	50-65 %	18-65 Total %	18-29 %	30-49 %	50-65 %	18-65 Total %
Professional	7.8	16.3	20.5	13.9	13.5	21.4	14.8	18.7
Managerial/ Administrative	- -	10.6	- -	8.9	3.5	6.4	4.6	5.5
Clerical	25.0	29.3	- -	25.8	35.4	28.7	27.4	30.3
Sales/Service	43.0	32.7	31.8	36.1	31.4	27.1	32.5	28.7
Processing	12.5	5.8	- -	9.2	9.2	7.9	10.2	8.4
Other	- -	5.3	- -	6.1	7.0	8.5	10.5	8.4
Total No.	128	246	44	418	653	1,776	256	2,685
Total	30.6	59.0	10.4	100	24.3	66.1	9.5	100

Source: See Table 33.

Table 28
Percentage of Employed Female Lone and Married Parents by Occupation and Age Group, United States, 1985
(000's)

Occupation	Current Age Group							
	Lone Parent				Married Parent			
	18-29 %	30-49 %	50-65 %	18-65 Total %	18-29 %	30-49 %	50-65 %	18-65 Total %
Professional	2.5	11.9	11.3	9.3	7.6	17.7	15.6	15.3
Managerial/ Administrative	6.2	12.7	8.6	10.5	9.1	12.4	12.5	11.7
Clerical	26.2	26.9	24.6	26.5	28.5	30.5	30.2	30.1
Sales/Service	45.1	30.6	37.9	35.4	36.1	25.7	27.3	28.1
Processing	14.0	13.1	12.9	13.3	13.5	10.0	10.9	10.8
Other	6.0	4.7	4.7	5.0	5.2	3.7	3.5	4.0
Total No.	1,423	3,203	578	5,204	3,192	10,046	1,450	14,688
Total %	27.3	61.5	11.1	100	21.7	68.4	9.9	100

Source: See Table 33.

Table 29
Percentage of Female Lone and Married Parents by Family Income and Age Group, United States, 1985
(000's)

Current Age Group	Family Income $ <5,000 %	5,000 - 9,999 %	10,000 - 14,999 %	15,000 - 19,999 %	20,000 - 29,999 %	30,000 - 39,999 %	40,000 - 49,999 %	50,000- 74,999 %	75,000+ %	Total %
Lone Parents										
18-24	- -	22.5	14.1	7.6	7.2	5.3	3.3	2.6	- -	100
25-29	33.5	23.9	17.0	10.0	7.6	4.0	1.8	- -	- -	100
30-39	23.8	20.2	18.6	13.8	13.8	5.4	2.5	1.5	- -	100
40-49	17.8	20.0	15.8	13.9	17.4	7.7	3.9	2.2	- -	100
50-64	14.5	18.8	18.8	14.3	16.4	10.1	5.0	- -	- -	100
Total No.	1,907	1,579	1,276	913	951	463	235	138	49	7,511
Total %	25.4	21.0	17.0	12.2	12.7	6.2	3.1	1.8	0.6	100
Married Parents										
18-24	8.6	18.3	20.6	16.8	21.4	9.0	4.1	- -	- -	100
25-29	3.7	7.6	12.6	15.6	27.4	19.1	8.5	4.3	1.1	100
30-39	1.6	4.8	7.5	9.3	23.0	23.5	15.2	11.2	3.9	100
40-49	2.0	3.9	5.5	7.0	18.0	21.6	18.7	15.9	7.4	100
50-65	1.8	4.9	6.4	8.9	17.3	18.8	17.7	15.5	8.6	100
Total No.	608	1,421	2,035	2,395	5,080	4,846	3,381	2,582	1,077	23,425
Total %	2.6	6.1	8.7	10.2	21.7	20.7	14.4	11.0	4.6	100

Source: See Table 33.

Table 30
Percentage of Female Lone and Married Parents by Number of Income Earners Canada, 1986[1] and United States, 1985

	Canada		United States	
No. of Earners	Lone Parent %	Married Parent %	Lone Parent %	Married Parent %
None	27.3	3.6	30.1	6.2
One	46.1	23.4	45.1	36.8
Two	19.1	55.3	17.0	40.4
Three^{+}	7.5	17.7	7.8	16.6
Total %	100	100	100	100

Source: [1]Burch, T. And McQuillan, K., 1988. One-Adult and Two-Earner Households and Families: Trends, Determinants and Consequences.

Table 31
Female Lone and Married Parents by Average Number of Income Earners and Current Age Group, Canada, 1986[1] and United States, 1985

Current Age Group	Average Number of Earners			
	Canada		United States	
	Lone Parent	Married Parent	Lone Parent	Married Parent
18-24	0.4	1.5	0.9	1.3
25-34	0.6	1.6	0.7	1.3
35-44	1.1	1.9	1.1	1.8
45-54	1.6	2.5	1.5	2.3
55-64	1.5	2.4	1.4	1.9
Ages 18-64	1.1	1.9	1.0	1.7

Source: [1] Burch, T. And McQuillan, K., 1988. One-Adult and Two-Earner Households and Families: Trends, Determinants and Consequences.

Table 32.
Percentage of Female and Male Lone Parents and Female Married Parents by Home Ownership and Age Group, Canada, 1984
(000's)

Current Age Group	Female Lone Parents			Male Lone Parents			Female Married Parents		
	Owned %	Rented %	Total	Owned %	Rented %	Total	Owned %	Rented %	Total
18-24	19.1	80.9		- -	- -		45.1	54.9	
25-29	29.4	70.6		- -	- -		68.2	31.8	
30-39	43.3	56.7		71.1	28.9		84.2	15.8	
40-49	48.8	51.2		70.4	29.6		86.5	13.5	
50-65	78.0	22.0		78.1	21.9		90.3	9.7	
Ages 18-65									
Total No.	234	292	526	114	42	156	2,884	696	3,580
Total %	44.5	55.5	100	73.1	26.9	100	80.6	19.4	100

Source: See Table 33.

Table 33.
Percentage of Female and Male Lone Parents and Female Married Parents by Home Ownership and Age Group, United States, 1985
(000's)

Current Age Group	Female Lone Parents Owned %	Female Lone Parents Rented %	Female Lone Parents Total	Male Lone Parents Owned %	Male Lone Parents Rented %	Male Lone Parents Total	Female Married Parents Owned %	Female Married Parents Rented %	Female Married Parents Total
18-24	32.0	68.0		- -	- -		37.1	62.9	
25-29	24.3	75.7		- -	- -		59.3	40.8	
30-39	41.2	58.9		57.9	42.1		78.6	21.4	
40-49	53.1	46.9		65.2	34.8		87.5	12.4	
50-65	66.1	33.9		72.0	28.0		88.1	11.8	
Ages 18-65									
Total No.	3,163	4,348	7,511	3,700	1,292	4,992	17,753	5,672	23,425
Total %	42.1	57.9	100	74.1	25.9	100	75.8	24.2	100

Source: All tables, unless otherwise noted, are derived from: the Family History Survey, Statistics Canada, 1984; the Current Population Survey, including the Marital History Survey, United States Bureau of the Census, 1985.